



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

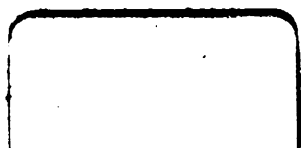


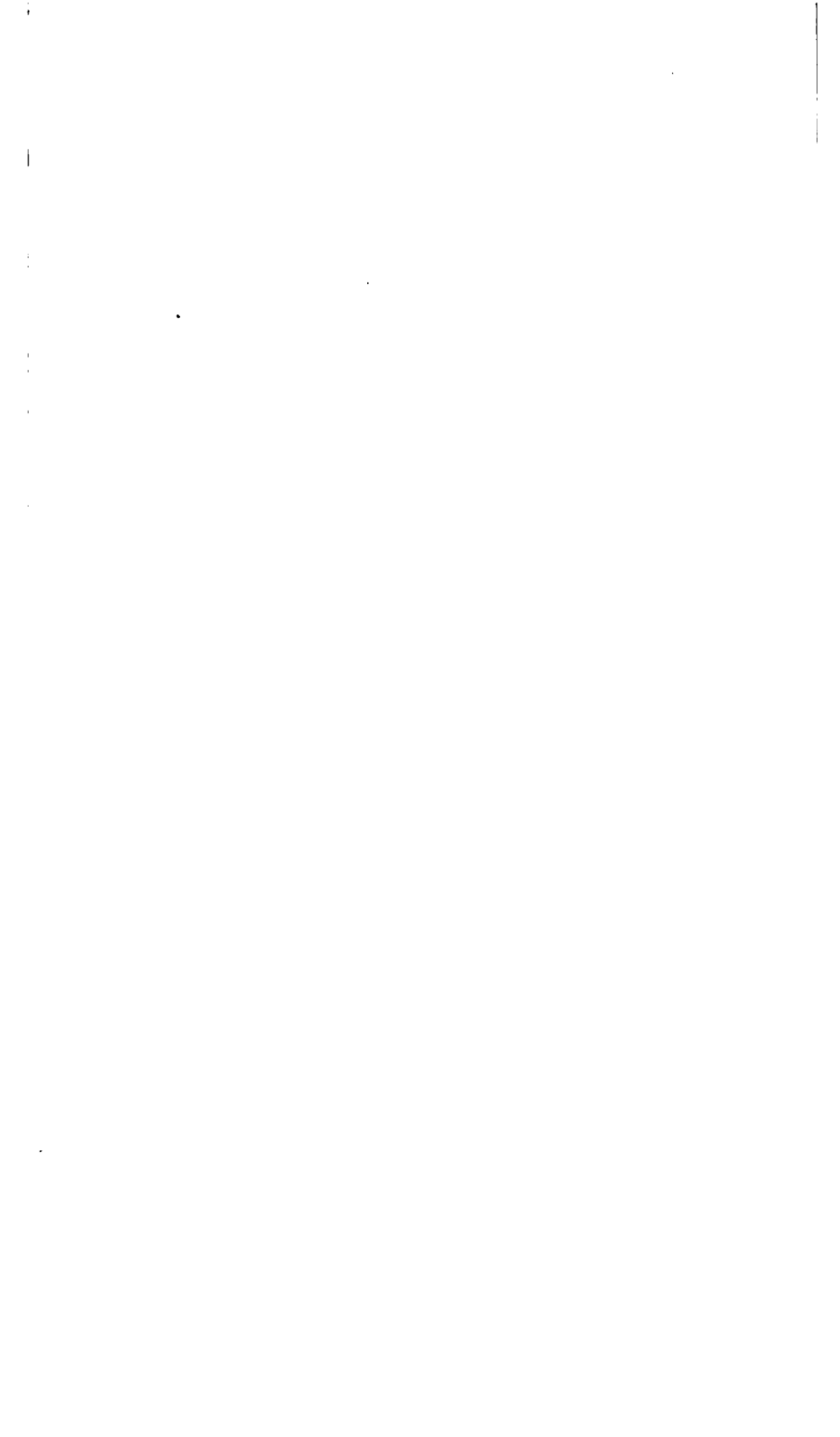
3 2044 028 887 51

HARVARD UNIVERSITY



**LIBRARY OF THE
GRADUATE SCHOOL
OF EDUCATION**







Studies in Education,,

A SERIES OF TEN NUMBERS

DEVOTED TO

Child-Study and the History of Education

1896-97,,

EDITED BY

EARL BARNES

Professor of Education in Leland Stanford Junior University

Vol. I.,

STANFORD UNIVERSITY
CALIFORNIA
1896-97

HARVARD UNIVERSITY
GRADUATE SCHOOL OF EDUCATION
MONROE C. GUTMAN LIBRARY



LB1105
.B3
v.1

STUDIES IN EDUCATION.

The ten numbers forming this series can be obtained for one dollar and fifty cents, or bound in cloth for two dollars, postage prepaid.

EARL BARNES,
Stanford University,
California.

Copyright applied for, 1897, by Earl Barnes.

CONTENTS OF STUDIES IN EDUCATION

1896-97.

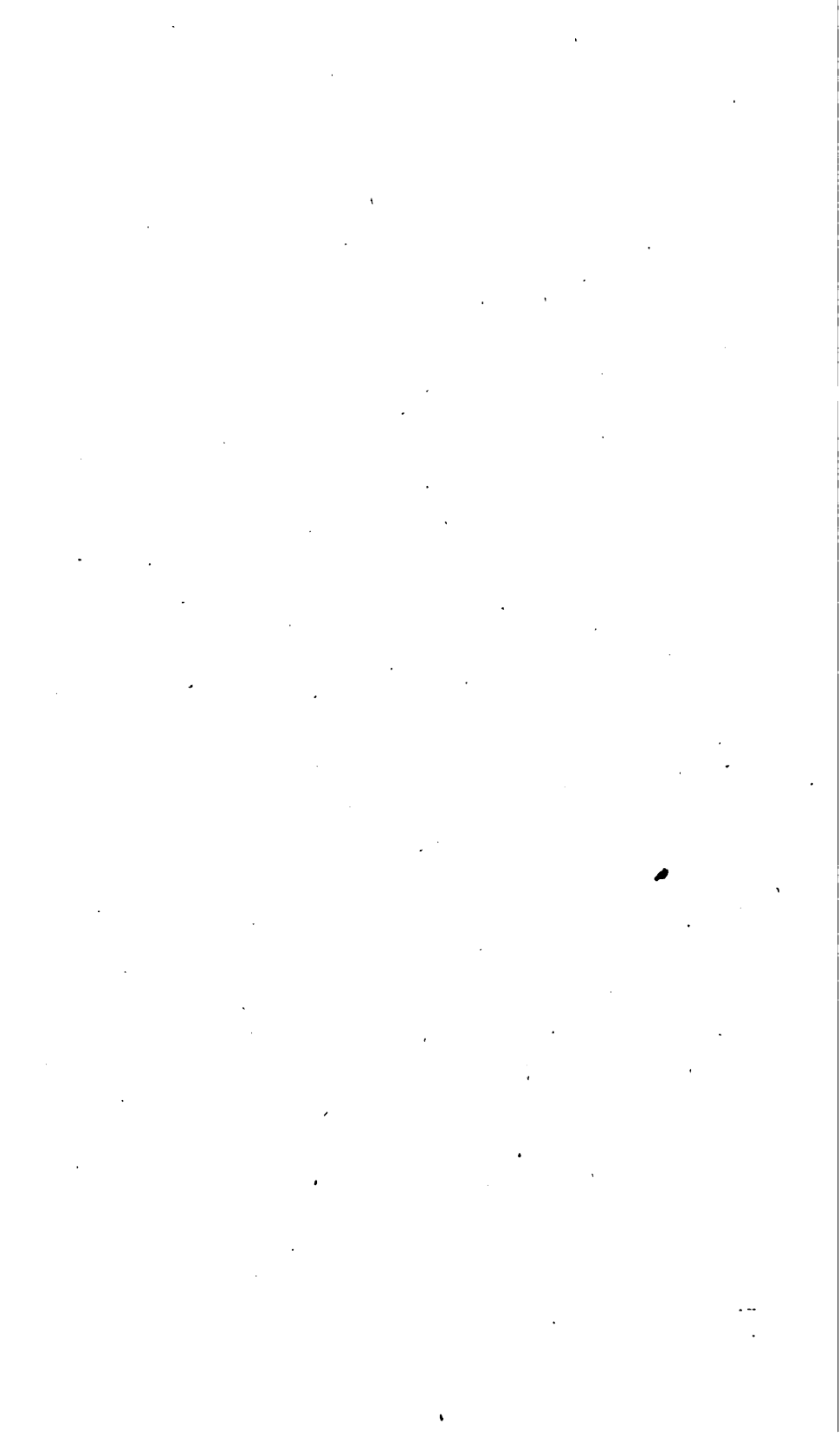
	PAGE.
INTRODUCTION	3
METHODS OF STUDYING CHILDREN—Earl Barnes	5
A STUDY OF CHILDREN'S OWN STORIES—Clara Vostrovsky	15
REMINISCENT STUDY: I. FEAR IN CHILDHOOD—Agnes Sinclair Holbrook	18
PICTORIAL EVOLUTION OF A MAN (Illustrated)—Earl Barnes	22
TWO LOVE STORIES, WRITTEN BY CHILDREN	24
DISCIPLINE: I. THE PROBLEM STATED—Earl Barnes	26
THE HISTORIC SENSE AMONG PRIMITIVE PEOPLES—Mary Sheldon Barnes	29
THE DEVELOPMENT OF THE HISTORICAL SENSE IN CHILDREN—Mary Sheldon Barnes	43, 83
CHILDREN AND GHOSTS—Louise Maitland	53
REMINISCENT STUDY: II. MEMORIES OF THINGS READ—Agnes Sinclair Holbrook	58
THE STORY OF BLUEBEARD (Illustrated)	62
TWO LITTLE GIRLS' STORIES	65
BIBLIOGRAPHIES OF CHILD-STUDY—Earl Barnes and C. J. C. Bennett	68
DISCIPLINE: II. WHAT TO READ—Earl Barnes	71
EDUCATION AS SEEN IN AZTEC RECORDS—Earl and Mary S. Barnes	73
HOW CHILDREN JUDGE CHARACTER—Anna Köhler	94
REMINISCENT STUDY: III. HELEN: THE LIFE HISTORY OF CERTAIN IMAGINARY COMPANIONS—Clara Vostrovsky	98
HANNS GUCK-IN-DIE-LUFT (Illustrated)	102, 154
A BAD (?) GIRL'S STORY	107
DISCIPLINE: III. HOW TO STUDY THE SUBJECT—Earl Barnes	110
HISTORICAL IDEALS AND METHODS OF CHINESE EDUCATION—Earl and Mary S. Barnes	112
A STUDY OF CHILDREN'S SUPERSTITIONS—Clara Vostrovsky	123
REMINISCENT STUDY: IV. CHILDREN'S COLLECTIONS—Earl Barnes	144
TWO LITTLE BOYS' STORIES	147
DISCIPLINE: IV. EXAMINATION OF THE EVIDENCE—Earl Barnes	149
THE NEW ENGLAND PRIMER—Agnes Sinclair Holbrook	156
INTELLECTUAL HABITS OF CORNELL STUDENTS—Earl Barnes	163
CHILDREN'S PLAYS—Genevra Sisson	171
REMINISCENT STUDY: V. CHILDREN'S ATTITUDE TOWARD GHOSTS—Louise Maitland	175
GEORGE WASHINGTON AND THE CHERRY-TREE (Illustrated)	178

CONTENTS—*Continued.*

	PAGE
BIBLICAL STORIES	182
BIBLIOGRAPHY OF CHILDREN'S PLAYS—Genevra Sisson	184
DISCIPLINE: V. HOW TO WORK UP THE EVIDENCE—Earl Barnes	190
THE TEACHING OF ENGLISH AFTER THE AMERICAN REVOLUTION— Agnes Sinclair Holbrook	194
A STUDY ON CHILDREN'S INTERESTS—Earl Barnes	203
CHILDREN'S ATTITUDE TOWARD LAW—Estelle M. Darrah	213, 254
REMINISCENT STUDY: VI. CHILDREN'S INTEREST IN PLANTS—Kath- erine A. Chandler	217
POLLIWOGS AND FROGS (Illustrated)	223
DISCIPLINE: VI. THE REDUCING OF DATA TO NUMERICAL TABLES— Earl Barnes	228
MY EDUCATIONAL RECOLLECTIONS—Hermann Krüsi	230, 273
AGNES SINCLAIR HOLBROOK	240
CHILDREN'S AMBITIONS—Hattie Mason Willard	243
WHO HAS THE BEST RIGHT?—Genevra Sisson	259
FRAGMENTARY THINKING (Illustrated)	264
EPISODES IN THREE LIVES	266
DISCIPLINE: VII. THE TABULATED RESULTS—Earl Barnes	270
THE CHILD'S ATTITUDE TOWARD PERSPECTIVE PROBLEMS—Arthur B. Clark	283
STUDY IN REMINISCENCE: VII. WHAT DETERMINES LEADERSHIP IN CHILDREN'S PLAYS—Clara Vostrovsky	295
A LITTLE GIRL'S LETTER	297
DISCIPLINE: VIII. GENERALIZATIONS—Earl Barnes	299
BOOKS AND PAMPHLETS INTENDED TO GIVE SEX-INFORMATION— Earl Barnes	301
THE DEVELOPMENT OF PERSONALITY IN CHILDREN—Edward Howard Griggs	309
CHILDREN'S SENSE OF MONEY—Anna Köhler	323
CLASS PUNISHMENT—Caroline Frear	332
PERSEUS AND MEDUSA (Illustrated)—David Starr Jordan	338
CHILDREN'S ATTITUDE TOWARD PUNISHMENT FOR WEAK TIME SENSE —David S. Snedden	344
CHILDREN'S MOTIVES—Alma Patterson	352
THE CHILD AS A SOCIAL FACTOR—Earl Barnes	355
CHILD-STUDY: GENERAL CONCLUSIONS—Earl Barnes	363
TWO CHILDREN'S STORIES—Margaret Graham Hood	369
BIBLIOGRAPHY OF THE PUBLISHED WORK OF DR. G. STANLEY HALL —Earl Barnes	371
THE INTELLECTUAL LEADERSHIP OF GERMANY IN THE NINETEENTH CENTURY—Mary Sheldon Barnes	380
THE HISTORY OF EDUCATION: GENERAL CONCLUSIONS—Earl Barnes	391
THE PROGRESS OF THE GODS—Edward Howard Griggs	396
NOTES	39, 119, 397
INDEX	398

Studies in Education

I.



STUDIES IN EDUCATION

EDITED BY

EARL BARNES,

Professor of Education in Leland Stanford Junior University.

JULY, 1896.

INTRODUCTION	3
METHODS OF STUDYING CHILDREN—Earl Barnes	5
A STUDY OF CHILDREN'S OWN STORIES—Clara Vostrovsky	15
REMINISCENT STUDY: FEAR IN CHILDHOOD—Agnes Sinclair Holbrook	18
PICTORIAL EVOLUTION OF A MAN (Illustrated)—Earl Barnes	22
TWO LOVE STORIES, WRITTEN BY CHILDREN	24
DISCIPLINE; THE PROBLEM STATED—Earl Barnes	26
THE HISTORIC SENSE AMONG PRIMITIVE PEOPLES—Mary Sheldon Barnes.	29
NOTES	39

VOL. I.
No. 1.

STANFORD UNIVERSITY.
1896.

\$1 a Year.
15 c. a Copy.

STUDIES IN EDUCATION.

These studies begin with July, 1896. They will be continued as a monthly publication for ten numbers, and will then stop. The last number will contain an index, and a full table of contents. The cost for the year is one dollar, or fifteen cents a number. Address all inquiries or subscriptions to

EARL BARNES,

Stanford University,
California.

Entered at the Post Office in Stanford University as Second-class Mail Matter.

INTRODUCTION.

Our principal object in publishing these *Studies* is to assist teachers and parents who wish to study their children in the light of recent methods. Accordingly, we shall try to present, from month to month, sample studies approaching the problems of childhood from various points of view.

A series of studies on discipline in the family and in the school will be published as a working illustration, with such suggestions as may enable interested parents and teachers to carry on similar studies throughout the year. Each number will also have a short story told by a child, taken down by a stenographer, and annotated with questions and suggestions as to the psychological meaning and educational bearing of the story, and a child's drawing, reproduced and annotated in the same manner. A descriptive and critical bibliography of some department of child-study will appear in each issue, after the first.

The second object of the *Studies* will be to gather up, and arrange for convenient use, the results of the studies made in our department during the past five years. Each number will contain one somewhat extended article, and one or two shorter ones, on the psychology of childhood; also a study based on the reminiscences of a class of 130 students. Some of the articles will be reprinted from other periodicals, where they originally appeared. The following is a list of the leading articles, subject to modification :

Methods of Studying Children.....	Earl Barnes
Children's Sense of Property.....	Margaret E. Schallenberger
A New Study on Children's Interests.....	Earl Barnes
The Development of a Child's Personality..	Edward H. Griggs
Children's Superstitions.....	Clara Vostrovsky
Children's Ambitions.....	Hattie Mason Willard
Children's Sense of Money.....	Anna Köhler
Children's Time-Sense.....	Alma Patterson
Intellectual Habits of College Students.....	Earl Barnes
Children's Plays.....	Genevra Sisson

Art with Young Children	Louise M. Maitland
Children's Historical Sense	Mary Sheldon Barnes
Children's Attitude Toward Law	Estelle M. Darrah
A Study on Children's Drawings.....	Arthur B. Clark

In each number a study on the history of education will be given. No attempt will be made to bring unity into these studies; but each will stand complete by itself. The following is a list of subjects, which may, however, be modified:

The Historic Sense Among Primitive Peoples.....	Mary Sheldon Barnes
Type-Study of Education Among Primitive Peoples.....	E. and M. S. Barnes
Education Among the Ancient Chinese...E. and M. S. Barnes	
Life of Herman Krüsi (Pestalozzi's co-worker). Herman Krüsi	
Noah Webster as an Educator.....	Agnes Sinclair Holbrook
Educational Work of Lindley Murray. Agnes Sinclair Holbrook	
The Children's Crusade	Margaret Schallenberger
Educational Ideas of the First French Republic.....	Estelle M. Darrah
The New England Primer.....	Agnes Sinclair Holbrook
How Modern Prussian Schools Began...Mary Sheldon Barnes	
Pedagogical Value of the History of Education...Earl Barnes	
New Educational Ideas in the French Cahiers of 1789....	Earl Barnes
Descriptive and Critical Bibliography of the History of Education.....	Earl Barnes
Educational Conditions in America in 1830 .Henry D. Sheldon	

Ten numbers will be printed, and then the publication will be discontinued.

E. B.

METHODS OF STUDYING CHILDREN.

EARL BARNES.

Whatever success has attended educational efforts in the past has been due to the direct or indirect study of human nature. The newness of the movement of the last ten years consists in the facts that this study has become self-conscious; that it concerns itself with the individual during the period of childhood and youth, and that it uses, to some extent, the methods of modern inductive science. Child-study, as we understand it, is not, however, a pure science at all. Physiologists and psychologists who look out from their laboratories and laugh at our clumsy attempts to use their tools, make the mistake of thinking that we are trying to do their work. This is not true, though we are trying to use some of their tools. Child-study is at present largely an applied science; it is prosecuted for the most part by parents and teachers who want knowledge that can be used in the development of the children for whose future happiness and usefulness they are immediately responsible.

Child-study has to-day the same relation to psychology that horticulture has to botany. There is no reason why the horticulturist or the farmer should not be a careful reader, an intelligent experimenter, a close observer of facts, and there is no reason why his conclusions should not be sound; but his work is much more particular and circumscribed than that of the botanist. He wishes to know the possibilities of a particular plant under particular conditions of cultivation. He wishes to know the possibilities of the particular piece of ground he is working. He has neither time nor interest to cultivate plants the use of which he cannot see. At the same time that his work is more narrow than that of the botanist, it is more diversified and extended. He cannot stick to the single line of experiment which he has begun; he must study all the conditions of life that bear upon the profit of his work;—pests, markets, fashions, in turn demand attention, and must be studied in their relations to the plant in his garden. And yet the horticulturist may

be a very intelligent man; he may even be allowed to meet his kind to discuss his studies, and to publish and read his reports of work done and results reached. The difficulty comes when the horticulturist tries to reach general conclusions from a limited study, broken by the demands of a practical life. Then the botanist rightly calls a stop. It seems to me that the analogy between this case and our own work is very close. A pure science may be developed from the scientific study of the natural history of childhood, and such a science will be profoundly valuable to psychologists, anthropologists, philologists, and all students who deal with man. We who are now working in child-study will add our increment to this science; but our results will most of them be of local and temporary value. This need not at all discourage us.

The methods for a practical science must always be different from those used in so-called pure science. The farmer, the gardener, the schoolmaster, and the parent, must make their scientific study secondary to their immediate duties to cattle, plants, and children. Poorer apparatus must be pressed into service; records must be kept at odd times; side light must be drawn from every available source; and, in the absence of actual knowledge, tentative generalizations must be accepted as probably true, and they must be used as the basis of action.

In the following pages an attempt will be made to describe and criticise the leading methods of child-study now being employed in our country.

1. Undirected Observation The most extended, and probably the in Every-day Home and most useful, work being done in child-School Life study to-day is doubtless that of undirected observation in every-day home and school life. Those who deny the necessity of conscious, direct study of children, always point for confirmation of their statements to certain mothers and teachers who know nothing about child-study, but know all about children. They forget that a fountain cannot rise higher than its source, and that it is impossible to get something from nothing. These women who know have each of them been close, though possibly unconscious, students of the phenomena of childhood in the homes and schools where they have lived and worked. They have their own unconscious methods of experiment and study. The value of this unconscious method, if such it may be called, lies in the fact

that it is unconscious. The observer may be just as much subject to prejudice and theory as though she were consciously working on a hypothesis; she may, by unwise experiment and probing curiosity, do as much harm to the child's personal rights as though she were working out the lines of a modern syllabus on a child's religious feelings; but while she remains unconscious, she gets nearer to the real child than she will be likely to get when she has incased herself in a mental suit of psychological nomenclature and formal syllabi. The disadvantages of the method lie in the fact that its results cannot be transferred to another, except possibly by a sort of spiritual contagion. Coöperation is nearly impossible, and advance of any kind is very difficult. When at its best, it gives us that most charming thing, an art unconscious of itself; when at its common level, it gives us the practice of cut and try again. Education can no more depend upon teachers unconscious of their art than medicine can depend upon healers unconscious of their art; and yet from this method of unconscious study we shall always gather a large harvest of wisdom.

2. Miscellaneous Written Collections, without any Hypothesis A line of work closely allied to the last is the getting together of miscellaneous written records of children's activities, regardless of any hypothesis. The work of the Worcester Normal School, under the direction of Principal E. H. Russell, well illustrates this line of activity.¹ These collections are made from personal observation, from reading, and from hearsay. The advantages of this method are: that it keeps the student as unconscious of himself and his activity as he can be; leads him out into all-around observations; keeps the child before him as a unit, and gives us data uncolored by any particular hypothesis, and valuable for illustration and suggestion. The objections to the method are: that it encourages scattered and disorganized study on the part of the student; it may prevent his seeing relative values in the phenomena he observes, and it gives a body of material drawn from every variety of circumstance, possessing every degree of accuracy, dealing with every kind of data, and incapable of being reduced to any common unit for purposes of organization.

The method is best fitted for young students who are in the

¹ See *Pedagogical Seminary*, Vol. II, p. 343.

collecting period of their development; but, if long enough continued, I fear it may lead to a feeling of futility, which must always overtake mere collectors. It may be urged that the work is based on the method formulated by Bacon and used by Darwin; but it is a method which has so far reached results only when applied in a limited field. It is true that we need great collections of materials illustrating children's activities, which will do for our work what a systematic botany does for the worker in plants; but even such an undertaking can only be carried to a successful issue by limiting the work of an individual or an institution to particular fields such as children's games or children's ambitions.

3. Personal Reminiscences of the Student Practically, in our real work with children, we probably draw more upon our memories for an interpretation of their acts than upon any knowledge we have gained through the study of other children. If this is so, then the study of the personal reminiscences of the student ought to be one of the best methods for getting at knowledge valuable in applied science. In our own work we have found no method more useful for students and teachers who wish to understand children than that of carefully writing out their own memories along vital and definite lines. Such work clarifies and sharpens the concepts by which we judge the subjective states of the children with whom we work; or, to put it differently, it strengthens our sympathy; it gives us practice in the study of subjective phenomena at first hand, and it gives us individually the truest information we can ever have concerning children's feelings. Besides this, we are able, by this method, to study a state of consciousness in its connections, working out causes and effects near and remote. The objections to the method are: that by thinking of ourselves we may forget the child; the facts are distant in time, and memory is treacherous; and all such data are colored by personal experience and prejudice. Nevertheless, it remains that in interpreting children's mental activities and feelings, we can never rise above our own real and possible experiences.

4. Personal Journals, or Letters of Children Closely allied to these personal reminiscences of the student are the journals and other records kept by children, and the letters written by them. These records have the value of being contemporary with the ideas or feelings they record, and since the journals are generally intended for

private reading, they are as frank and unconscious as any expression we can get. The journal of Marie Bashkirtseff¹ illustrates this sort of material at its best. It is especially valuable for catching those fleeting shades of feeling and extravagancies of imagination which are so easily forgotten in our reminiscent studies, and they are free from the coloring of later experiences. The defects in these studies are largely due to the inability of the children to express themselves, owing to their vague and undifferentiated states of consciousness, their weak analytical power, and their slight command of language, written or spoken. Then, too, children are so imitative, and they so quickly catch the manners of others, that their records are sometimes lifeless little reproductions in miniature of diaries or letters they have seen, and of the thoughts and feelings they imagine the people around them think they ought to have. But even in a book like Anna Green Winslow's *Diary*,² one can always read between the lines much that is suggestive, and a little girl masquerading in her elder's intellectual clothes is a bit of child-life well worth our study, providing we do not let her fool us into thinking she is really grown-up, or that she is a real child.

5. Reminiscent Autobiographies, Written or Printed Still one step further removed from our own personal reminiscences are the autobiographies with which literature abounds. Such studies have the values and weaknesses of our own personal reminiscences, plus the difficulty that they must be interpreted by us. They give us facts seen generally at a distance of some years, through the obscuring mists of later experiences, and seen not by us directly, but through the difficult medium of another personality, whose experiences and prejudices must be translated into terms of our own vocabulary of life. Besides this, the fact that such records are prepared for publication brings them under all the strong influences that affect books for the market. Such studies, however, as John Stuart Mill's *Autobiography*,³ Pierre Loti's *Romance of a Child*,⁴ or Tolstoi's *Childhood, Boyhood, and Youth*,⁵ give us opportunity to

¹ Journal of Marie Bashkirtseff. Translated by A. D. Hall and G. E. Heckel. Pp. 823. Chicago; Rand, McNally & Co., 1890.

² Diary of Anna Green Winslow, a Boston school-girl of 1771. Edited by Alice Morse Earle. Pp. 121. Boston; Houghton, Mifflin & Co., 1894.

³ Autobiography. By John Stuart Mill. Pp. 313. New York; Henry Holt & Co., 1887.

⁴ The Romance of a Child. By Pierre Loti. Translated by Mary L. Watkins. Pp. 179. Chicago; Rand, McNally & Co., 1891.

⁵ Childhood, Boyhood, Youth. By Count Lyof N. Tolstoi. Translated by Isabel F. Hapgood. Pp. 244. New York; Thomas Y. Crowell & Co., 1886.

study childish thoughts, feelings, and actions against different backgrounds of personality and circumstance, and they are profoundly suggestive as to fruitful lines of investigation to be pursued by other methods. The biographies of the boyhoods of famous men are still another step, and sometimes a long run, removed from the original phenomena we wish to study.

6. Artistic Interpretations of Childhood To some men it is given to see directly into the heart of things. Artists and poets belong to this class, and they have always loved to interpret children. In pictures, romance, and poetry, we shall doubtless find much of wisdom for our work as teachers and parents. However, it is well to remember that such interpretations are generally from the grown-up point of view, and how far the most exquisite adult interpretations of child-life may be from a child's interpretation of himself, may be realized by submitting to a healthy child of eight or nine the charming child poems of Robert Louis Stevenson,¹ or Pater's *Child in the House*,² and then contrasting his expressions with the results obtained from *Jack the Giant-Killer*, or *The Struwwelpeter*.³

The five methods of study so far sketched give us single, personal, isolated studies, generally incapable of being reduced to a common basis for purposes of quantitative expression. The general observations of child-life about one, the gathering of unrelated collections of observations and incidents, the writing up of one's personal memories, the study of children's diaries and letters, and the wide reading of autobiographies, will quicken our interest, broaden our sympathy, and give us a larger understanding of special instances. However, if such work is not accompanied by direct and well-ordered observation, by experimentation and statistical study, leading to some general quantitative results, it is apt to leave us with a feeling that human life is not amenable to law; that circumstance, desire, and will, can brush aside everything except the law of gravity. These studies are absolutely indispensable; but they need to be set in a background of large generalizations, based on studies in actual life. By gathering reminiscent studies along some definite lines,

¹ *A Child's Garden of Verses*. By Robert Louis Stevenson. Pp. 101. New York; Charles Scribner's Sons. 1893.

² *The Child in the House*. By Walter Pater. Boston; Copeland & Day. 1895.

³ *The English Struwwelpeter*. By Dr. Heinrich Hoffmann. London; Griffith, Farran & Co.

and by selecting, through wide reading in autobiography, materials bearing on particular lines of thinking and feeling, generalizations can doubtless be worked out that will have large value. The thing most needed to-day is, however, brilliant studies on masses of commonplace children.

7. Direct Studies on Children All strong advance in science has so far been made through the direct study of reality, and probably one comes nearest to the reality with which education deals when he stands in the immediate presence of a child. True, the phenomenon he would study is a subjective one, and it is shut off from him by diffidence, imitation, acquired expressions, lack of expression, and all those other baffling conditions that shut off one soul from another. Still it remains that when the observer is with a child he is nearer the phenomenon he wishes to understand than he is at any other time. Direct studies on individual children must give us whatever of final knowledge we achieve concerning children. When we come to apply the same skill and honesty to the study of the natural history of childhood that we now devote to botany and zoölogy, we shall make great progress in our treatment of children.

Here and there to-day trained psychologists are taking up specialized studies on a single child, or on a few children, with carefully arranged conditions; sometimes with specially devised apparatus in laboratories. The educational application of most of the work of this kind so far done is difficult to see;¹ but honest, careful inquiry, conducted by intelligent men, must ultimately yield valuable results. A study like that of Mr. Luckey² seems to promise a means of making a perfect examination of a child's color-sense at any time. Such a promise holds great possibilities in the way of testing different lines of educational action.

8. Biographies of Young Children Most of the direct study so far has, however, been devoted to babies. The studies led by Preyer³ have produced a considerable fund of information, and they are capable of much greater usefulness than has yet been realized. With very young children, one finds the phenomena of human life

¹ See *Drawing a Straight Line: a Study in Experimental Didactics*. By E. W. Scripture and C. S. Lyman. In *Studies from the Yale Psychological Laboratory*. Oct., 1893. Pp. 92 to 97.

² *Comparative Observations on the Indirect Color-Range of Children, Adults, and Adults Trained in Color*. By Geo. W. A. Luckey, in *The American Journal of Psychology*, Vol. VI, No. 4. Pp. 16.

³ *The Mind of a Child*. By W. Preyer. Translated by H. W. Brown. Two vols. New York: D. Appleton & Co. 1889.

in their simplest forms. The child, free from all responsibilities, expresses whatever passing feeling possesses him. It is, however, true that the difficulties here are very great. The child has slight command of any form of expression. The observer must generally translate what he sees into terms of his own consciousness before he can make a record, and the circumstances of a child's life are generally such that no steady conditions can be maintained. However, by confining such studies to one or two lines of activity; by carrying them along lines already worked out, so as to make comparisons and massing of results possible; and, by carrying the observations beyond the period of early infancy, we may hope to reach valuable results.

9. *Statistical Studies, on The gathering of masses of data along pre-*
the Lines of a Syllabus determined lines, generally following headings indicated in a syllabus, is a method of child-study full of promise. Probably the study made by G. Stanley Hall, on *The Contents of Children's Minds on Entering School*,¹ has had a larger influence on pedagogic activity than any other direct study so far made on children. The successive steps in carrying through a study of this sort may be described as follows: First, one must see something worth studying, which will probably yield to this method; or, to put it differently, he must formulate his question, or state his hypothesis. This requires genius of the first order, and, so far, the great majority of studies started in our country have been suggested by Dr. Hall. I have a collection of some 200 syllabi sent out from all over the United States, and nearly all of these can be traced directly or indirectly to the little pamphlet, *The Study of Children*,² published by Dr. Hall in 1881. One-half the investigations started to-day have no subject,—they simply wander off and are lost,—and one-half of the subjects chosen are impossible. Having chosen a subject, the investigator must next select his test, or arrange his experiment. This means something more than merely printing and circulating a page of syllabus. As Prof. James says: "It will be well for us in the next generation if such circulars be not ranked among the common pests of life."³ The experiment must be so devised that it will

¹ *The Contents of Children's Minds on Entering School.* By G. Stanley Hall. In the *Pedagogical Seminary*, Vol. I, No. 2.

² *The Study of Children.* By G. Stanley Hall. Somerville; privately printed. 1881.

³ *The Principles of Psychology.* By William James. New York; Holt & Co. 1890. Vol. I, P. 194.

unravel a single skein of activity, and it must be fitted to the actual living and working conditions of those who are to gather the data. It is useless to ask the overburdened teachers in our city school systems to work out a great mass of personal data concerning each of their children. They simply cannot do it. They can, however, easily get a written expression from their children on almost any subject where they can present the work as a composition exercise. In the third place, data must be gathered, or experiments made. It is at this point that most of our syllabus-workers drop out, for this step, and the next, require the genius of hard work. The data once collected, they must be generalized. Collating-sheets must be made out following the actual lead of the data, and day after day, and week after week, the investigator must plod through his material, laboriously analyzing and classifying it. His results reached, he must interpret them, and apply them back to the problems of human life. Here, again, genius of the first order is needed. To look into the great whirling mass of human life, and see how and where your generalization fits, and can be applied, is as great a feat as to look into that great complex life in the first place, and see what needs to be known that can be known.

The advantage of this method is that it gives us widely prevalent conditions and activities, and possibly persistent laws, which can serve as the basis for educational practice, and give their proper background to individual studies, showing how large their elements of variation are, and whether they are away from or toward the progressive tendency. The objection urged to this method is that it must be worked through untrained people, and a stream cannot rise above its source. This objection is sufficient to condemn the work if it requires nice discrimination and accurate statement from large numbers of teachers or parents. Tests can be arranged, however, so that the investigator can gather his own data, or he may make the tests very simple, and of a nature to prevent the teacher or parent from obtruding himself. In the second place, it is said that such tests must necessarily give you a mass of accidental matter, owing to the varying conditions of nationality, home-circumstance, and school-setting. I have worked over a good many thousand papers during the past few years, and, wherever the test is simple, and well executed, the results are as steady and law-abiding as those obtained for the study of any other data dealing with the phenomena

of human life. But the critic insists: If one does get a uniform result, it is useless, for we have to educate single children, not masses, and this deindividualizing of the child is the great evil of the day. This objection has an element of truth in it; but so long as children are to be educated in groups of two or more, and this will probably continue so long as people are to live in groups of two or more, so long will it be valuable to know how groups live, think, feel, and act. The seating and lighting of buildings, the arrangement of programs, the making of text-books, the assigning of lessons, all the problems of discipline, and, still more, the determining of each individual's personal qualities against this background of averages,—all this makes the demand for such studies imperative.

Undoubtedly, the best student of the natural history of childhood is he who uses all methods in due proportion. If a man goes about his daily work with his eyes and his heart open; if he lives over his own childhood's life, with an honest desire to see what kind of a child he was, and what kind of a man he is, quickening his memory with childish records and autobiography; if he studies children under carefully arranged conditions, bringing the same fair-mindedness and persistence to his work that the scientist brings to his laboratory; and, if he brings all these scattered studies into their due relations, by setting them in a background of general law, based on large quantitative studies, he will accomplish all that he can reasonably hope for in these days of beginnings.

A STUDY OF CHILDREN'S OWN STORIES.¹

CLARA VOSTROVSKY.

From the beginning of my work in teaching reading to children between the ages of six and eight, in the experimental school connected with Stanford University, I have felt that the majority of children's stories are not written so as to appeal most strongly to them. But how remedy this? What elements appeal, and what elements do not appeal, to young children? Coming into contact with their own spontaneous stories, made me feel that perhaps the best solution would come through a study of these stories.

Probably few persons realize the great difference there is between a child's way of telling something, and the way most stories of similar things are told by older persons for children. Let me give two examples showing this: First, a child's description of a little garden party; second, the same thing written up briefly for children by an older person.

THE CHILD'S STORY.

"Once I went down to see Alice Perkins. She has a goat, lots of chickens, and a rabbit, and she has a little cart for the goat, and a great big yard, in which there is a horse and a carriage, and roses and geraniums and lots of flowers. We made these flowers into wreaths and put them on. Then Mr. Hughes came and took our photographs, and one of the Gilman girls came over also, and sat down in a beautiful place with flowers all around her. After that we had refreshments and then went home."

THE STORY FOR THE CHILD.

"One day I went to a little garden party given by one of my friends. It is always a delight to visit this friend, for she has so many nice things which one can enjoy. There are cute little chickens, goats, and white rabbits, and such beautiful flowers in the garden. We amused ourselves by making wreaths of the flowers, which we

¹ Reprinted from the Pacific Educational Journal; August, 1894. (Slightly changed.)

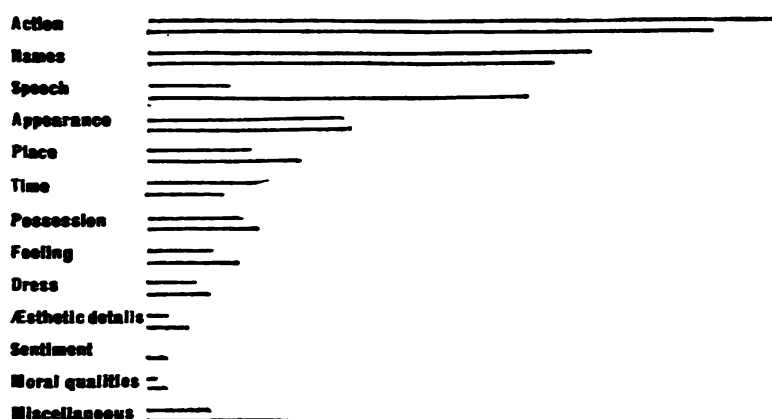
put on, so that we must have presented a very pretty appearance. Later, there in the bright sunshine, we had our photograph taken, one of the girls dressed all in white, acting as May Queen. Just before we went home, a delightful meal was served us. It will be a long time before we forget that pleasant afternoon."

In comparing the two, the difference between them is at once apparent. In the child's story, no sentiment is expressed; nor are his own feelings referred to in any way. There is little of the æsthetic; no description of dress or persons; and not general, but definite, names are used by him. On the whole, the child gives facts, and lets life itself speak for him. He has not yet learned that one can be in active pleasant circumstances and not be happy. With him, certain facts or conditions produce certain inevitable reactions, and to mention these reactions, seems to him an utter waste of words. Besides, he has not yet reached the unfortunate stage of thinking of them.

I have collated fifty-six children's stories—thirty-two by boys, and twenty-four by girls,—representing over a term's work. These stories were told, not written, by the children at school, they being allowed perfect freedom in telling anything they wished, the stories not being criticised in any way. After being type-written, they served for the next day's lesson. Forty out of the fifty-six stories are either about the child himself or about other children; one is about older persons, and fifteen are about other subjects. These other subjects have, however, in every case, the child himself more or less closely woven in with the story. For instance, a story of a snail ends with: "I have caught many snails. That is how I learned about them, and once when I——" etc. Forty-nine of the stories are true; only seven imaginary—three from boys, and four from girls. Only eleven deal with every-day subjects, things of common occurrence with the child; while forty-five, classified rather loosely perhaps, deal with unusual events, trips, parties, and so on. The difference in the numbers is a striking one.

In charting these papers, I have marked down not the actual number of characteristics, but the different characteristics appearing in one paper. Thus, the greatest possible number appearing under any head is fifty-six, the number of papers. I have classified the papers under: *Action*—"We played ship;" *Name*—"We went

to Palo Alto;" *Speech*—"John called out, 'Are you looking for your rabbit?'" *Appearance*—"A snail's shell comes to a point;" *Place*—"The girl lived in the woods;" *Time*—"Last Sunday;" *Possession*—"Alice has a goat;" *Feeling*—"I like to ride;" *Dress*—"Helen was given a new pair of shoes;" *Æsthetic details*—"One day when the grass was green;" *Sentiment*—"My dog is a dear old dog;" *Moral qualities*—"Mr. M. is a polite man, because——;" and *Miscellaneous*. Below, I give the results in chart form, reduced to the same denominator. The lower line represents the girls, the upper line the boys.



From this, we see how very large a place *actions* and *names* have in a young child's interest, and how small a place *feeling*, *sentiment*, *æsthetic details*, and *moral distinctions* fill. No great difference is shown in the chart between boys and girls, although boys seem to care a little more for action, while girls care decidedly more for what is said.

If one may draw conclusions from so few papers,—and the tendencies are so marked that I believe one is justified in doing so,—stories for children should be true stories of child-life, dealing with the holidays, and other rather unusual events within the reach of children. The story should be mainly confined to action, with little description of persons or feelings. *Æsthetic details* and *moral rules* should play an insignificant part. Then, too, the persons and places mentioned should have definite names attached to them.

STUDY IN REMINISCENCE.

I. FEAR IN CHILDHOOD.

AGNES SINCLAIR HOLBROOK.

Any one who attempts to search into the nature of children's thoughts and activities is continually coming across something which makes him exclaim, "I used to feel just that way myself." Any class in child-study must develop interesting discussions around centers of reminiscence, some of which strengthen, and some weaken, the conclusions to be drawn from direct evidence of children. The 130 members of the '95-'96 class in Psychology of Childhood at Stanford have made a study of some of the best reminiscent biographies in literature, and have themselves furnished material on various subjects, the results of which will be presented here in a series of papers by the students, concluding with a composite opinion from the class as to the value of the reminiscent method of study, its advantages and its dangers.

Papers written in response to the request for "an account of vivid memories of fear in early childhood" furnish the foundation for the present study. The accompanying summary-table gives the writers' observations, reduced to a condensed form, while the text is an expanded statement of the same observations, with comments and illustrations.

SUMMARY-TABLE. TOTAL NUMBER INSTANCES, 138.

- I. Character of the fear 138
 - A. General (more or less continuous and vague)..... 84
 - 1. Natural phenomena, 49:
 - a. Unclassified (including shadows), 8. b. The Dark, 31. c. Death, 8. d. Thunder, 2.
 - 2. Supernatural phenomena (dim and haunting), 24:
 - a. Unclassified, 4. b. Monsters (awful shapes), 15. c. Hell, 4. d. Ghosts, 1.
 - 3. Vague, instinctive dread of "something," 11.

B. Specific (definite instances)	54
1. People, 24:	
a. Unclassified, 12.	
b. Deformed (blind, crippled), 4.	
c. Chinamen, negroes, Indians, 8.	
2. Animals (cows, wolves, bears, geese, birds, etc.), 17.	
3. Machinery, 7:	
a. Unclassified, 2.	
b. Locomotive, 5.	
4. Miscellaneous, 6.	
II. Causes	51
A. Stories told by elders, 15.	
B. Nervous shock (noise, knock, suddenness), 6.	
C. Pictures (wall-paper, etc.), 8.	
D. Element of size, 7.	
E. Loneliness (unusualness, mystery), 15.	
III. Personal reaction	27
A. Feeling of being paralyzed, 13.	
B. Running away, 5.	
C. Secreting facts, or hiding persons, 9.	

Fear in early childhood, to judge by these reminiscences, is most often a vague, haunting terror of the dark, of awful shapes, of "something I know not what." Out of 138 instances given, eighty-four (I, A) were of this general character, the remaining fifty-four (I, B) being connected with specified objects, nearly half of them people, a third animals, and the remnant chiefly some sort of machine, usually the steam-engine. Strangely enough, fear of the supernatural appears only half as often as fear of the real world of thunder and shadow and dark, though without doubt the element of the *super-known* is a powerful one in a child's notion of the phenomena we regard as purely natural and law-abiding. Terrors of the Calvinistic type would seem to take slight hold upon early years, for death and hell taken together are mentioned only twelve times. Ghosts figure but once.

Monsters are feared more than anything except the dark, and are often characterized by their "clutching" propensities. They seem to emerge from darkness, and partake of its very nature. One says: "My first fear was an indistinct living something—black, and possibly curly—which I feared would enter the room in the darkness from somewhere under the bed." Another: "I could see dark

objects, with great eyes and teeth (the rest of them was darkness), slowly and noiselessly descending from the ceiling toward me." Eleven papers report utter inability to describe the object of fear; while representing the sensation itself as vivid and terrible. This vagueness of the intellectualized aspect of the subject and intensity of the sensuous side mark the passion of fear as legitimate prey for educational activity. If clear conceptions are rarely co-existent with fearful emotions, it is not unreasonable to aim toward elimination of the latter by liberal infusions of the former.

The fifty-one causes voluntarily assigned in these papers suggest that bad, as well as insufficient teaching, is responsible for much of the fear that infests the childish mind. Isolation is equally conspicuous in this category. Fifteen (II, A) ascribe their fears to highly colored stories, that worked upon their terrified imagination, and fifteen (II, E) bring forward the element of loneliness, unusualness, mystery. Anything disassociated from its usual surroundings is bewildering.

A rooster's head thrown on a rubbish-heap produced an effect touching on the hypnotic. Unaccustomed people, different from the normal man in color, shape, or appearance, cause terror through their strangeness. Pictures (II, C) of awful things, wall-paper and chintz hangings haunt the mind in eight instances, a copy of Da Vinci's *Mona Lisa* calling forth a most noteworthy account of nervous dread that lasted for years. "Just what it was in this woman's face," says the writer, "that filled me with such terror, I have never been able to explain. The tangible part, which sometimes in moments of great bravery I tried to stare out of countenance, was the smile about the mouth; but the subtler, more terrible thing was a certain fixed *stillness* in the face. The steady quiet gaze with its haunting smile always met me in the same way and followed me to every corner of the room. It seems to me now that no picture, however horrible, that had been full of action, could have had the same effect. There was never any suggestion of her *doing* anything to frighten or hurt me, and it was this very quiet, so unchanging and unreal, that added an uncanny, haunting element to the fear." One is reminded of the immobile and serene qualities of the ancient gods, and their effect upon the undeveloped minds of primitive peoples.

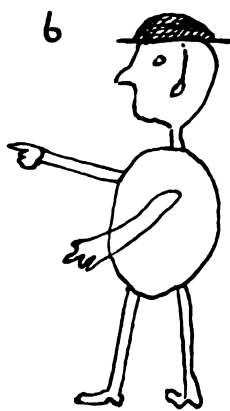
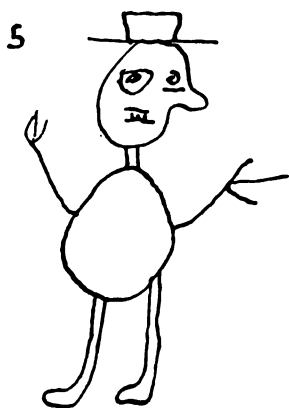
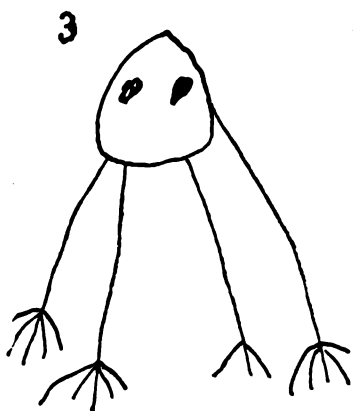
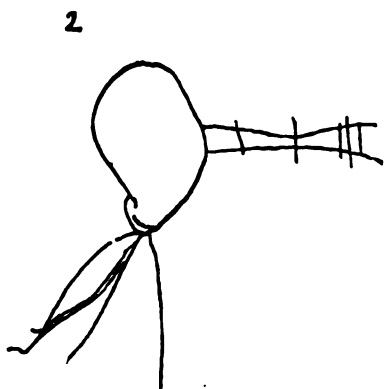
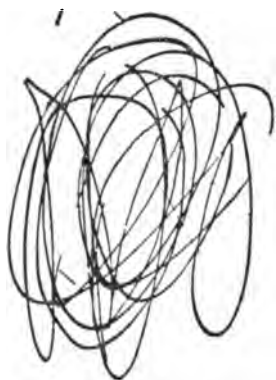
As might be expected by any student of child-psychology, the

effort to discover what particular sense is the chosen channel of fear proved almost fruitless. Noise is mentioned in scattered cases, and size is referred to by seven, but felt rather than seen. Color is rare, and form is frequently disclaimed. When we consider that fear is made up of sensuous impressions, in which reason plays a part inversely proportional to the vividness of the experience, and the second fact that the special senses are prominently affected in but few instances, the training of the eye, ear and hand assumes great, if not first, importance in dealing with the enemy.

In common with other primitive passions, fear possesses a fascination for its victim. One paper says: "I tried to frighten myself. When alone in the dark, I would say over and over to myself: 'Wolf, bear, ghost; wolf, bear, ghost.' When by these means I was in an ecstasy of terror, I would stand still and persuade myself that such things were not around." Thirteen mention the paralyzing effect of fear, the rooster-head above cited furnishing a picturesque instance. "At the sight of it," says the paper, "a strange, indefinite feeling, somewhat of numbness, came over me, and I felt myself—rather, my eyes—becoming riveted to the spot. Indeed, I would not have glanced elsewhere if I could have, for the result, I imagined, would be something awful. No movement was made. The only semblance to life that appealed to me was the bright, and apparently conscious, look of the eye. To this my attention was attracted. It appeared to be looking straight at me, and I fancied it wanted to say something." Perhaps the five who run away (III, B) express the attraction of repulsion. Nine are impelled to hide their thoughts or their persons (III, C) when under the influence of fear.

Taken altogether, the conception of childish fear which evolves from this study is that of an unreasoning state of helplessness, induced through the undifferentiated senses by a consciousness of the Great Unknown, generally associated with insufficient and fragmentary knowledge of the objective world. To say this is to say fear is ignorance, and the appropriate remedy suggests itself readily. Turn on the search-lights of exact information and objective fact, and exorcise the demon with the modern spirit of natural science and manual training.

THE PICTORIAL EVOLUTION OF A MAN.



COMMENTARY ON THE PICTURES.

These pictures were selected after working over 15,218 scenes drawn by children of ages from two to eighteen, illustrating events in a boy's life. The results of this part of the study were summed up in an earlier paper, as follows: "With a child of two years, the picture of a boy is a mere scrawl. The first part of his anatomy to emerge clearly is his circular head, with eyes and a mouth. Arms and legs sprout forth from his head, and then a line joining the two legs develops a body. With all very young children, the face is drawn full. In our experimental kindergarten, where the children had no instruction in drawing figures, they drew many faces, but no profiles, for several months. Gradually, the children change to profiles; but, in the transition stage, many draw a profile outline, and fill it in as though it were a full-face outline.

With a view to determining the general law, 12,740 faces were collated from the pictures drawn by children from six to thirteen years old. At six years, twice as many full-faces were drawn as profiles. From six to thirteen, full-faces decreased, and profiles increased, and, at thirteen, there were twice as many profiles as full-faces. The number drawn of each was equal at a point between nine and ten years old. This may mean simply that in the early diagrammatic period of drawing, full-faces are easier to draw, while, after nine, the child tries to really represent the face, and then profiles are easier. If this is true, it helps us to locate the point in a child's development where he begins to represent things as they really are, instead of diagrammatically, and nine years would seem to be the age at which the grammar of drawing might be introduced."¹

Corrado Ricci's conclusions, based on a study of 1250 papers, are much the same.¹ He says: "Ninety-nine times out of a hundred children try to give expression to a man by means of a square, or badly drawn circle, and two vertical lines, standing for the head and the legs. . . . Before a man becomes entire, he must pass through many stages, and they are not prompted to jump at once from this primitive form to complete physical integrity."²

¹ A Study on Children's Drawings. By Earl Barnes. 8 pp. In the Pedagogical Seminary, Vol. II, No. 3.

² L'Arte dei Bambini. By Corrado Ricci. Pp. 84. Bologna. 1887. (See translation of parts of this pamphlet, by Louise Maitland, in the Pedagogical Seminary, Vol. III, No. 2, p. 302.)

TWO LOVE STORIES WRITTEN BY CHILDREN.

I. LILL.

PARTY 1. A SORY OF A CHILD BY A CHILD.

Lill was a sweet child her mother had died when she was a baby. she had light blue eyes derme and soft she was very delcit her heir was goldan her father was very rich and tride to mack her happy. but after a year her father died. He was capton of the sheep Lill he coled it Lill after his daughter. she had to ber a lot of pane.

PART 2. LILL. A STORY OF A CHILD BY A CHILD.

When her father died she was sent to a aunt wuch she loved very much. her aunt was a sister of her deid mother. her aunt told her abot another aunt and abot her mother to. When she got quite well and strong there She had a most beutful voice, and she cud play very well on the violin. she had a tutor wch she liked very much.

PART 3. LILY. A STORY BY A CHILD OF A CHILD.

One day a man came to see her and she got to love him and he got to love her I forgot to tel you that she was 16 now he was 23. thay wer got engagd in 2 month they wer maryed preety soon she got tow little childrnd a boy and girl they wer the prtes childrend yow ever saw. thay bilt a lovly house with lovly gardens all rond it I wil tell you abot how porl and Margaret got lost in london.

—By a girl nine years old.

II. BY THE LAKE.

The hot sun beat on. A cool breeze came from the lake, out Elinora is not cooled. A hot fire burns in her heart. She thinks only of Rupert,—of the gallant Rupert, whose manner toward her, nevertheless, was cold and distant. She takes her lute in hand and

wanders to a seat by the lake. Her impassioned heart pours itself out in song. Accompanied by the sweet music of her lute, she sings, "Ah Elinora, thou proud one, thou thought thou couldst rule men's hearts! But now thine own is bound by love, and he—Rupert—thy beloved one—loves thee not. Alas, let my moan be heard only by the lake, while I sorrow alone." But she is not alone. Rupert, behind the tree, hears her lament. "Ah," he thinks, "there is hope for me." Then springing forward he throws himself at her feet. "Wilt thou be mine, most loved Elinora?" But only the lake hears her answer.

* * * * * * * *

Rupert and Elinora walk homeward, hand in hand. "My Rupert," she says fondly. And the lake murmurs to itself.

—By a girl nine years old.

COMMENTS, SUGGESTIONS, AND QUESTIONS ON STORIES I AND II.

Each number of the *Studies* will have one or more stories written or told by children, with an accompanying commentary. Our object in presenting these stories is to attract attention to the more or less spontaneous creations of childhood as admirable material for study, revealing not only peculiarities and tendencies in the children who produce the things studied, but oftentimes general tendencies in the human soul. The next issue will present stories from children about five years old. We will be obliged to any one who will send us a story or stories reported in the exact words of a child.

The story of Lill is written by a strong and healthy girl of nine. Stories of this sort are quite common for girls of nine or ten. Are they written at an earlier age than this? Do boys write or imagine similar stories? This one is evidently written on the general lines of books for youth. The writer is, nevertheless, a very independent girl. Might we infer, then, that this sort of story really appeals to a general interest, in girls at least? What are the desirable things in life from this girl's point of view? Why does this "delcit," "pane"-bearing orphan, whose father "tride to mack her happy," appeal as a sort of ideal to a strong and happy girl of nine?

¹ Stars appear in the original text.

The second story was written by a quiet, bookish girl or nine. It is more subjective, more poetic, and less active than the first. Is not the song which Elinora sings like primitive poetry—possibly like Ossian? How far does the subjective strain of the last and the more objective quality of the first go along with the bookish quality of the last girl, as contrasted with the active life of the first? Is it not significant that both stories lay a good deal of stress upon music? Do not these stories, in their dealing with idealized circumstance and details far removed from the actual life of the writers, seem to indicate that children's stories should not to be pure realism? The constant use of names—eight in the first, and ten in the last,—emphasizes Miss Vostrovsky's conclusions. The free movement, pressing directly on to the conclusion, and the lack of word-pictures, also agree with her study.¹ The matter is more subjective than in her study, but the children are older. Have all these incipient feelings about the tutor, and the man, and the two pretty children, any real physiological or psychological basis? Should they receive any attention in education? If so, what should be done? How far do your own reminiscences agree with these stories?

E. B.

DISCIPLINE AT HOME AND IN THE SCHOOL.

Under this title a line of work will be taken up and carried through the ten numbers of these studies. It will outline the problem of discipline, give suggestions for reading, arrange experiments, give sample papers gathered along the lines of the experiment, suggest outlines for collating the evidence gathered, present tables drawn from some thousands of the papers, give such conclusions as can be based upon the tables, suggest applications to the real life of children, and then outline two or three specialized studies. It is hoped that parents and teachers will carry on parallel lines of study with the children in their charge, comparing their results step by step, and giving us the benefit of such criticisms and suggestions as may come up in their individual studies.

¹ See p. 15.

I.—THE PROBLEM.

It is generally believed that in the historical development of the race we have passed through three stages in our attitude toward punishment. With the people whom we meet in early records, punishment means getting even with the culprit. It rests upon the idea that the offender should suffer as much as his victim does. Crime or wrong-doing is something to be offset or paid for by a certain amount of suffering or money. This is well illustrated by the old Hebrew body of penal law, expressed in the phrase, "An eye for an eye, and a tooth for a tooth." Nearly all feudal law rests on this conception, and the feud-system in certain parts of our own country is a survival of the same idea. In this state of development laws, judges and executioners exist to see that in the barter the criminal pays his full bill. Such punishment depends for its realization on the feeling of revenge, a feeling which, at least in its crude form, is rapidly disappearing with advancing civilization.

In the second stage of development, punishment is looked upon as a deterrent. The culprit is punished, not necessarily to offset his crime, but to frighten him and others so that they will not repeat the act. Most early theologies rest on this conception of punishment. Eternal punishment may follow a very slight fault, if the rest of the world can thereby be frightened away from wrong-doing. Much of our present penal code rests on this view of punishment. English law down to the present century inflicted the death penalty for a great variety of petty offenses, and the laws in this second period are often more severe than those springing from revenge. In this phase of development the laws and the judges exist as scarecrows to frighten evil-doers, and the whole idea rests for its realization upon the feeling of fear, a base and weakening feeling, which is undoubtedly, at least in this crude form, disappearing with increasing intelligence.

In the third case, the cause for wrong-doing is sought in disease or ignorance, and the aim of punishment is to educate or cure the culprit. This conception has already begun to modify our penal regulations. Reform schools for juvenile delinquents, the work of the Elmira Reformatory, the sentencing of criminals for not less than a certain period nor more than a maximum term, dependent on behavior, and the general abolition of severe punishments in dealing with young children,—all these movements depend on this new con-

ception of wrong-doing and crime. Under this idea, judges and executioners are transformed into criminal experts, and education becomes the principal instrument of the law. This last conception rests upon the feeling that justice should be done to the offender as well as to society.

The first question that an inductive study on this subject should help to answer is: Does a child in the process of his development from infancy to manhood pass through clearly marked stages in his attitudes toward punishment? If so, what are these stages, and are these stages the same as those passed over by the race?

Such a study should also throw some light on the development of children's sense of justice. The idea that what a man sows that shall he reap, dominates all three of the periods outlined. In the first, however, the feeling of justice centers about the individual wronged, the criminal's interests are ignored, and the public simply attends to seeing that the wronged one is satisfied; in the second stage, justice centers in the needs of society, and the public ignores the criminal and the wronged one in its eager desire to protect itself; in the last stage, justice concerns itself primarily with the criminal, as an integral part of the social organism, and is inclined to ignore, in a measure, the wronged one, and to trust that society will find its greatest security in the cure of the criminal. Do children pass through similar stages in their own sense of justice? Do they feel at first that they are to be recompensed; then that justice is satisfied if they are protected; and finally, that the criminal should be cured? Do our schools help to develop this advancing sense of justice?

Whether there is a parallelism between the development of the child and the race or not, there can be little doubt that this present generation is committed to the experiment of trying to cure wrong-doing by removing ignorance and disease. If this is so, then the question of first importance for us to meet is how properly to diagnose the culprit's own attitude toward his misdemeanor. Where punishment rests on the idea of getting even, it does not matter much what the culprit thinks or feels; if it rests on fear, we have only to make the punishment severe enough to produce fright: but if we are to cure or educate the mind away from crime, then the first and prime question is, How does the guilty one think and feel about what he has done, and about the punishment we propose to administer? Such a study as this must help to answer this question, if it is to justify itself.

E. B.

THE HISTORIC SENSE AMONG PRIMITIVE PEOPLES.¹

MARY SHELDON BARNES.

Studies of method have been in the past mostly deductive in character. This study is inductive, and seeks to find principles by the observation and comparison of such facts as relate to the historic sense among primitive peoples.

The historic sense can be separated into certain elements. It is born wherever the human mind attains the conception of making a true record of real and concerted human action, progressive through time, and connected by cause and effect. Take the Sagas of the North, Herodotus, the *Books of the Kings*, Mommsen's *Rome*,—take anything you will that men call history, and you will find this to distinguish it from myth and story,—that it is considered as true; this to mark it off from biography,—that it relates to groups of men; this to separate it from sociology, philosophy, or literature,—that actions are its theme, and these actions are related by cause and effect acting through continuous time. Wherever, then, in our examination, we are led toward these elements of a true record, of continuous time, of cause and effect, of the social unit, we are led on toward the historic sense.

According to its desire and object, this historic sense embodies itself in different forms. If it wishes a record for the memory, it appears as mnemonic or reference history, as lists of kings and priests, or in some sort of chronology, embodying what is striking or easily memorable. If it wishes for glory or power, it appears as æsthetic narrative, choosing what is splendid, terrible, appealing to the senses. If it wishes to instruct or develop a certain type of character, it becomes didactic history, choosing such material as may serve the purpose of its ideal; it becomes the history of the good and bad. If it wishes to explain, to connect the social unit with the world of being, it becomes philosophic or theologic history. If it simply wishes to discover what is true, it becomes scientific.

¹ Reprinted from *Studies in Historical Method*. By Mary Sheldon Barnes. Boston: D. C. Heath & Co. 1896.

We have hardly yet become conscious of the value and power of the historic sense. Yet it is the sense by which we enter into the life of universal man; by which we see him crunching his half-burned bones in his hidden cave,—by which we see him sitting on thrones of gold, exulting in slaughter,—by which we join the heroes of Thermopylæ. Wherever man has lived, we live, and feel, and know; our own personality is widened by the personality of ages and races, until we run back for thousands of years, and out into thousands of souls; and, equipped with this wider personality, this new environment of intellectual and spiritual existence, we find ourselves able more deftly and certainly to understand the present, and foresee the future. Through the historic sense, humanity becomes self-conscious and self-directing.

How, then, does this precious historic sense, this self-consciousness of humanity, this organ by which we seize on the past and future of man,—how does it arise? How shall we discover its dim psychologic origins; its overgrown path? We must look in two ways,—to primitive peoples, and to children.

The Bushmen are reckoned as being in the lowest known stage of human culture. Let us start there. The Bushmen do not count above three, have no known traditions of origin, nor any known myths. In them we find the example of a people with no historic sense. Other Australian tribes rarely count beyond three, although they can go as high as seven. They have no way of marking time; they have traditions of origin, and represent past events by dramatic dances. Here we find a general sense of past time, a notion of a swarm of men hanging together, while the dramatic dance gives a primitive record of single events. In this case, then, we get all the beginnings of the historic sense, in vague ideas of time, of a social unit, of cause and effect, and of a record.

The Veddahs of India count as high as five, have a tradition of origin, and worship their ancestors. Here, again, we meet the notions of cause and effect, and of a social unit enduring through time. This latter idea here enters the domain of faith;—an important point to note.

Let us strike a little higher in the range of culture, among the Polynesians. The Sandwich Islanders counted by tens, recorded time by knotted cords or quipos, divided the year into months by the moon, worshiped their ancestors, deified national heroes, whose

relics they sacredly preserved, and had dramatic dances and epic songs representing incidents in the lives of their kings. Here we get the idea of continuous time, marked into definite periods which are recorded. The idea of the social unit has broadened from the tribe to the nation; the power to record appears in quipos, dances, and fixed epics, all under sacred guardianship, in order to keep them true and fixed from generation to generation.

Let us try the Dakotas. They have a decimal notation going as high as a thousand. They have a calendar, called a winter-count, divided into winters, marked by events and running back a hundred years, kept by pictographs on hides; they divide the year itself into moons; they have dramatic dances and legends of origin. Here we get all the beginnings of history; but more strongly than before, they appear to be bound together into a large unit of continuous time. The Chippewas, Creeks, Iroquois, were about equally advanced.

How is it with the Esquimaux? They can count by tens into thousands. They reckon time by winters and nights; reckon the time of night by the position of the constellations; keep count of time by notched sticks; have traditions running back for hundreds of years; celebrate the heroic deeds of their ancestors by poems. Here history has become conscious of itself, and the poem gives a record fixed more or less firmly by its rhythmic nodes.

Let us rise to another stage of culture. The ancient Mexicans counted on by fives indefinitely. They marked months and years by astronomical observations, and recorded them by a highly developed calendar; had a geographical knowledge as extensive as the range of their merchants; recorded past events by picture-writing, which aided and fixed the oral tradition, while their calendar furnished exact dates. They worshiped national heroes, while songs and hymns embraced mythical legends.

Such are the facts which appear. What do they tell us of the evolution of history?

The first attempt at historical narrative appears in the myths of origin. In these, three elements of the historic sense appear,—the notion of past time, the notion of the social unit, and the notion of cause and effect. The notion of time is obscure and vague. The social unit appears in the conception of a tribe or people hanging together by itself. The idea of cause and effect appears in the

attempt to explain this common swarm, who speak and look and act alike, by reference to some common origin. In its form this myth must be classed as philosophical.

Let us see how each of these ideas grows. The notion of the social unit develops through ancestor worship into the worship of national heroes or gods, who embody themselves as national and divine rulers. This line of development embodies itself mostly in æsthetic history, the history that adorns the individual by the glory of his family, tribe, or nation; that adorns him with an aureole of antiquity, splendid deeds, heroic character. Didactic history also springs from this same root,—the sense of the social unit, and the wish to keep this unit bound together by the same ideals. Thus Clavigero tells us of the ancient Mexicans:

“We cannot express too strongly the care which parents and masters took to instruct their children and pupils in the history of the nation. They made them learn speeches and discourses which they could not express by the pencil; they put the actions of their ancestors into verse, and taught them to sing them. This tradition dispelled the doubts, and undid the ambiguity, which paintings alone might have occasioned; and by the assistance of these monuments perpetuated the memory of their heroes and of virtuous examples, their mythology, their rites, their laws, and their customs.”—*Clavigero, ii. 11.*

The second notion which appears in the myth of origin, that of cause and effect, cannot be claimed by history alone; this attempt to answer how and why is the mother of science as well, and along this line finds a rich development in a whole range of nature myths, developing into natural philosophy, and finally into natural science. On the side of attempted history, it gives us all the myths of the culture-heroes,—stories of migrations, of the founding of towns, of the making of laws; a mass of pure fancy, most of it, historical critics discover. Yet this is the most creative of the historic notions; the myths exploded, the old stories discredited,—the mind still asks how and why, and so develops, first, historical philosophy, and at last, and painfully, historical science.

The notion of continuous time appears later than either of the other historic notions, and seems more difficult to attain. The first step toward it is taken by the power to count; the next, by the continuous observation of sun, moon, and stars, reaching over periods of not less than a year; and the last, by the invention of

some way of recording time. This invention appears as a notched stick or bone, a knotted cord, a winter-count kept by events. This last form of the invention is of a special interest, as it is at the same time a calendar and a chronicle, sure to lead, if uninterrupted, to mnemonic and chronologic history. The Homeric catalogue of ships in the second book of the *Iliad* is a familiar example of this form.

But how does that special element of the historic sense, the idea of a truthful record, develop? From three needs,—the need of recording property, the need of remembering ancestors, and the need of conveying information. The notched stick may tell you how many oxen you own, how many ancestors you reckon, or how many enemies are on the warpath. In all these cases, the record may be false; but its value depends on its being considered true, since it forms a last court of appeal. Hence the pains that are taken in early times to keep a record fixed, by giving it a permanent material, like bone or stone, by embodying it in rhythmical songs and dances, or in conventionalized groups of knots, or lines, or pictures. As a further development, these are placed under the guardianship of priests and temples, where they may be protected by superstitious awe. In every such attempt we recognize a sense of truth, a sense of the value of evidence, of the preciousness of the relic, the song, or tradition that was once contemporary.

All the elements on which history is founded appear, then, among primitive peoples,—the sense of the social unit, the power to reason, the sense of continuous time, the invention of a true and permanent record, as well as the sense of its value.

Let us test our conclusions by some special instances. Let us study first the winter-count of the Dakotas. This was a chronological calendar, invented by the Dakota, Lone Dog, and consisted of a buffalo-skin, on which pictographs were painted, each representing the most notable event of one year. About seventy years were reckoned backward, and the events to mark them were chosen by consultation with the oldest and most influential men of the Dakotas. What material did they choose as worthy of remembrance? Of the seventy years, nineteen are marked by biographic details concerning warriors or unusual men of some sort; twenty-one by events that concern the tribe as a whole. Among these we note two years of famine, two of epidemics, two of dancing and

feasting, a great eagle-catch, a great buffalo-catch, the building of a great lodge. Thirty-three years are marked by inter-tribal wars; five by inter-tribal peace; one by a pestilence striking many tribes in common; three by inter-tribal stealings. Three years are marked by notable events among white men; and these are specially noteworthy, as leading toward extra-tribal history. One year is marked by the appearance of Spanish blankets; one by the first distribution of beef to the Indians by the United States Government. The year of Custer's Massacre takes no note of this event, but of the fact that the United States took their horses away from the Indians! Another year is marked by the coming of the whites; another by the first appearance of shod horses; one only by a supernatural event, although extraordinary natural phenomena, such as extreme cold, an eclipse, or a falling star, mark six years.

The points revealed by this analysis are, that in the material chosen the main interest attaches itself to the tribe in its inter-tribal relations, although slight but important traces of an interest in other tribes and the whites appear. The historical character of the calendar is sharply defined by the fact that only one supernatural event appears. The very object of the calendar reveals the consciousness of continuous time, and a serious effort to mark it as such; the method of comparative consultation reveals a sense of truth. We get, then, in this winter-count, all the elements of the historic sense except the idea of cause and effect, which, from the nature of the material, disappears. On the side of form we have here a reference list of dated events; that is, the mnemonic or reference form, just on the eve of chronicle.

Let us look in another direction,—at the clan-songs of the Polynesians of the Hervey group. Gill, who has collected them on the spot, and who resided among the people for many years, says:—

“I soon found they had two sets of traditions,—one referring to their gods, and the supposed experiences of men after death; another relating veritable history. The natives themselves carefully distinguish between the two.”—*Gill*, p. 7.

In examining this collection of historical clan-songs, we find that out of thirty-eight stories preserved, twenty-five commemorate some ancestor. In some cases this is the ancestor of a whole tribe; if not, of some notable family in the tribe. Eleven commemorate the deeds of a hero of the tribe, not an ancestor; in one remarkable

case this is of a culture-hero. Nine celebrate the collective action of the tribe; five seem to be told simply as interesting stories of love and adventure; one seems to keep its place for simple beauty; and one seems to have a distinct ethical purpose. Five only have a touch of the marvelous: this appears once in the form of a giant; once as a giant-oven; in a third and fourth, the wonder is the coming of Captain Cook; and in the fifth, the first iron axe. It will be noted that in none of these cases does the marvelous depend on the supernatural.

In these songs the historic interest centers itself almost entirely about individuals, related to those who tell their deeds and sufferings. These deeds and sufferings are almost always of interest and importance to the tribe, and are remembered with two objects, apparently: one is to hearten the survivors and frighten their enemies by deeds of daring or terror; the other object is also a practical one,—namely, to keep alive feelings of revenge by recounting past woes and sorrows. Add to these objects the desire to remember, and we get history; not in the form of a list, but in the form of a song, whose rhythms and refrains impress the memory and please the sense. You remember; you are struck; you are taught.

Aside from these songs, these same tribes have pure mnemonic history, as seen in three lists of priests, including a succession of from nine to twelve men, and two lists of thirteen chiefs each. On reading the Bible to them, Gill notes that these Polynesians were greatly interested in the genealogies, and explains it by the fact that among them "the chief with the longest pedigree is most respected." In fact, he further notes that the Bible has taken the place of their old songs and myths as a body of history. (*Gill, pp. 352-353.*)

In the Bible we get a body of history dealing with a people far advanced on the road to civilization. The genealogies give us a long vista of backward-running time; the events cluster always about the chosen people of God, as the historic unit or swarm. But the interest is carried into Egypt and Assyria with the journeys and wars of their heroes; the narrative is carried on in chronologic order by the names and deeds of a genealogic succession of patriarchs, kings, and prophets; it is kept true and unchanged by records on stone, skin, and brick, placed under the guardianship

of priests. It is mnemonic in its genealogies, æsthetic and didactic in its narrative. These narratives, then, display the highest development of primitive people in the field of history; and further we will not look.

To sum up: First, the knowledge which we call history rests upon the sense of cause and effect, the sense of the social unit, the sense of time, the sense of the value of a true record. These all appear early in vague forms, as in myths of origin, and all advance together, now this idea, now that, leading, but no one idea allowed to get positively ahead. Of the four, the idea of time and of the true record lag; and yet we find even these well developed among peoples as advanced as the Polynesians.

Second, the whole mass of primitive historic material is essentially personal and actual; it commemorates the tribe, the hero, the ancestor, with which there is a personal connection. This interest widens as actions and events connect the tribe with the larger world. Thus the Indians become interested in the whites through their horses; the Polynesians in the English through Cook; the Jews in the Egyptians through Joseph.

Third, the mass of primitive history appears in three characteristic forms; in myths, explaining the reason why,—a primitive philosophy, often permeated with primitive theology; in lists, used as a chronologic string, to assist the memory; in æsthetic and didactic narratives, intended to dazzle, terrify, or instruct. A most pointed instance of this last purpose is given by Gill, where he tells us that one of his deacons confessed to having provoked a fight “in order that his name might go down to posterity with glory.” (*Gill*, p. 336.)

But how can scientific history evolve? The notions on which it is based,—time, the social unit, cause and effect, the true record,—all exist among primitive peoples; but how do they learn to develop and combine these notions?

Mnemonic history cares only for memorable events, and pays little attention to cause and effect; didactic and philosophic history selects those events which are useful as examples for conduct, or which illustrate a theory of history; while æsthetic history preserves only what is beautiful, glorious, and striking. Add to that, that the three last forms are often protected by the whole force of a faith and a social and moral system, and you have some notion of the diffi-

culty in the way of the development of scientific history. A primitive people feels that the story must be beautiful and worthy, the great man wholly admirable—divine, an ideal beyond question. The story thus becomes fixed and sacred, so that it may be preserved in its pure and original form. But, alas! that original was not true; and now, confirmed by the faith of generations, it is an almost impossible task to change, alter, or add in behalf of what may prove to be the truth. How, then, does the truth arrive? Through war, trade, and those endless questions of the critical mind,—why and how. The sacred quiet of the temple is broken by conquest and the rude irruption of the unbelieving heathen. Once broken, the clashing of national myths and legends arouses skepticism, the mother of truth, and history becomes broader in its outlook and truer to its records. The trader goes afield with his wares and his traditions. He finds other traditions, upheld with as sacred energy as his own, perhaps more reasonable on their face; he doubts, he modifies, he questions his facts, and so comes to have a sense of evidence which enables him to distinguish between the false and the true. After the Greeks trade to Egypt they begin to be historians; the father of history was a traveler living in the days of the Persian Wars.

Trade and war are two ways which lead to historic criticism. The development of natural science brings us into a third way. From the beginning, men try to account for things, to give a reason. If they do not know, they invent one. If they find huge fossil bones in the earth, they tell stories of giants; if they live in a land called Hellas, they invent a first settler called Hellen; if they find themselves sowing wheat in a land where no wheat grows, they tell of the goddess who brought it from heaven and showed them how to sow it. These myths, half history and half science in their form, are a large part of tradition; and as they are tested by long experience, by wider knowledge of geography, zoölogy, physics, they break down, knowledge supplants belief, and men trust more to law, to reason, to experience; and so the scientific spirit comes to the aid of the sense of evidence, and both develop that sense of truth, which is, sooner or later, applied to history.

SOURCES USED IN THIS STUDY.

- Clavigero, Francesco S., *The History of Mexico*. Translated by Charles Cullen. London, 1787. 2 vols.
- Gill, Rev. W. W., *From Darkness to Light in Polynesia*. With illustrative clan-songs. London, 1894.
- Mallery, Garrick, *Picture-Writing of the American Indians*, in *Tenth Annual Report of the Bureau of Ethnology*, 1888-1889. Washington, 1893.
- Mallery, Garrick, *Pictographs of the North American Indians*. A preliminary paper in *Fourth Annual Report of the Bureau of Ethnology*, 1882-1883. Washington, 1886.
- Chaillu, Paul du, *The Viking Age*. New York, 1889.
- Reeves, Arthur Middleton, *The Finding of Wineland the Good*. London, 1890.
- Spencer, Herbert, *Descriptive Sociology; or groups of sociological facts classified and arranged*. London and New York, 1873, etc. Eight numbers published. No. 2, on Ancient Mexicans, etc.; No. 3, on Types of Lowest Races, etc.; No. 4, on African Races; No. 5, on Asiatic Races; No. 6, on American Races. (Most valuable collection for general studies of this sort.)

Studies on this subject are the following:

- Hewitt, F. J., *Historical Methods of Record before the Use of Written Characters*. *Westminster Review*, January, 1895.
- Spencer, Herbert, *Professional Institutions*. *Popular Science Monthly*, 1895. Chapter iv. in the August number, on the *Orator, Poet, Actor, and Dramatist*, and chapter v. in the September number, on the *Biographer, Historian, and Litterateur*, contains much on primitive history.
- Peet, Stephen D., *Culture Heroes and Deified Kings*. *American Antiquarian*, May, 1894.
- Bancroft, H. H., *The Native Races of the Pacific States of North America*. 5 vols. New York, 1875. Vol. iii., on *Myths and Languages*, and vol. v., on *Primitive History*, are storehouses of material.
- See, also, chapters in Tylor, Mallery, Brinton, Spencer, and other writers on primitive man.

NOTES.

Inductive Study Modern inductive study has a tendency to leave people very much at sea in their conclusions when they first begin using its methods. Mr. Leckey says somewhere that it is the aim of all modern civilization to bring people to the point where they can endure the agony of a suspended judgment. Whether this be true or not, it is certainly desirable that each human being should at some time in his life stop and examine the foundations of his beliefs and his practices. A few days ago a young woman who has been doing some work for me on a bunch of compositions in which children describe punishments which they have received and which they considered unjust, wrote me a letter which began as follows: "I find that I do not know what you expect the result of this study to be. Isn't it that from a study of these papers we will gain a little knowledge that will help us when we begin to study children individually? We can't use it in any other way; it can be of no direct use, can it? Then when we have found out what each child thinks concerning punishment, what he should be punished for and how, are we to conform to his ideas? And as he grows and changes them, shall we change our treatment accordingly, whether it agrees with our notion of just punishment or not, until he knows what a crime is, and what a reasonable punishment for it is? How do we know that he will develop in the right way if we do this? Isn't there something that I ought to read before I try to think definitely about it?"

After these questions the young woman brings together some observations and generalizations that are truly admirable. Meantime she has asked the really vital foundation questions which must be considered by any one interested in any of our modern methods of study, and she has been brought to these questions by immediate contact with the real difficulties. It may be that she will never feel quite so sure of her foundations again, but her mind is in a good condition for attacking the problems of actual school life, and she has attained a bit of that same wisdom which made the oracles declare Socrates the wisest man in Athens.

Moral Ideas Miss N. M. Woodward, who has been teaching the boys in the Whittier State School for two or three years past, has been gathering some interesting data bearing on the general ideas of morality held by the boys in her classes. She had one hundred and twenty-seven of them, averaging thirteen and a third years old, write a little composition describing the virtues necessary to make a good man and a true citizen. In these compositions forms of temperance were mentioned a hundred and five times; honesty was mentioned fifty-six times; freedom from profanity thirty-two times, and truthfulness twenty-seven times. It must be remembered that these boys have been sent to Whittier from the various police courts of

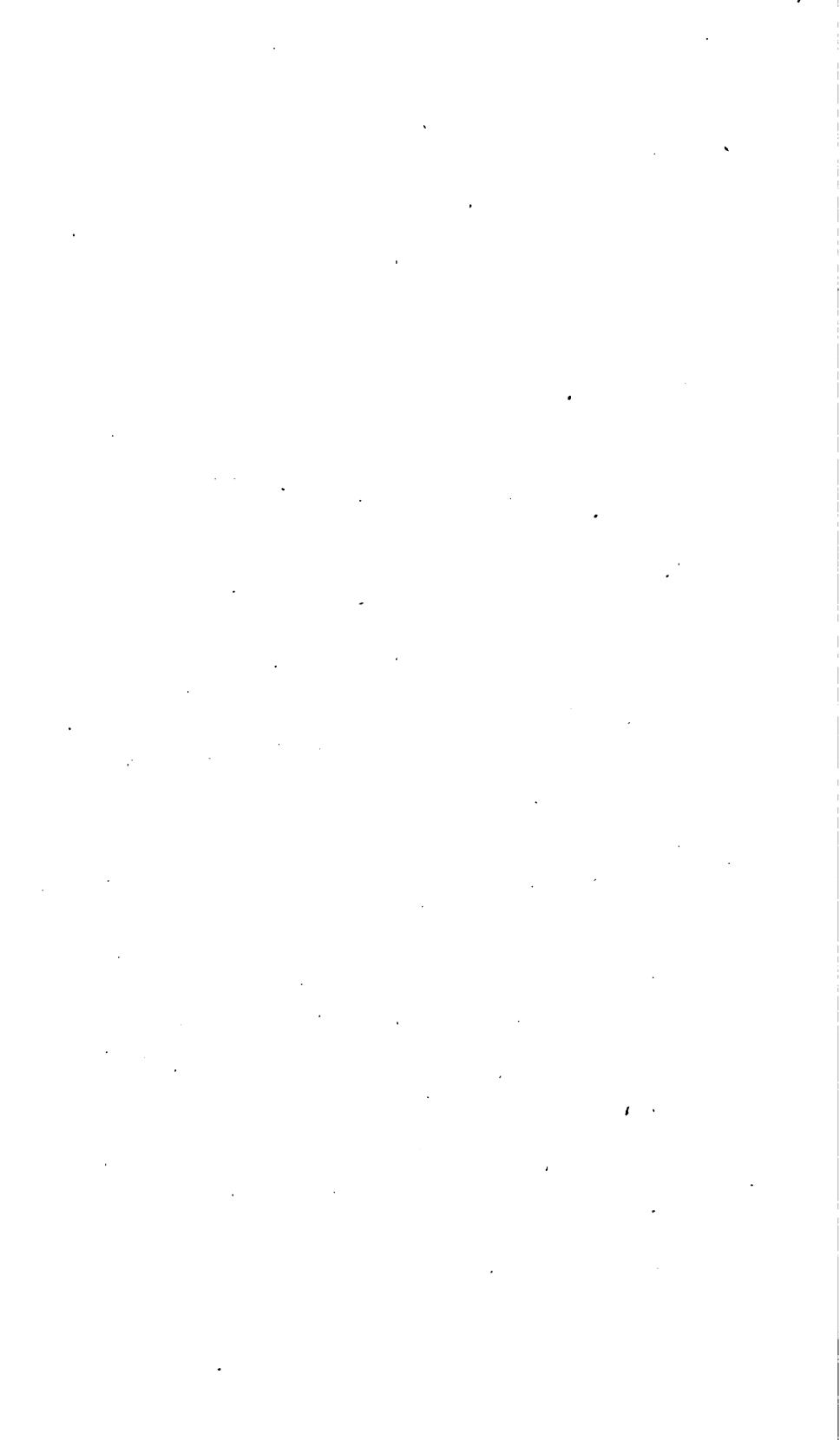
the State because of various misdemeanors of some sort. Do the figures show that the children are more afraid of intemperance than of lies, or has the evil of intemperance been impressed upon their minds with four times as much strength as the virtue of truthfulness?

Vertical Writing In view of the present interest in vertical writing it is interesting to find the holy father, Basil, who lived from 330 to 379 A. D., sending the following advice to a writer of his day:

"Write straight, and make the lines straight. Do not let your hand go too high or too low. Avoid forcing the pen to travel slantwise, like Æsop's crab. Advance straight on, as if following the line of the carpenter's rule, which always preserves exactitude, and prevents any irregularity. The oblique is ungraceful. It is the straight which pleases the eye, and does not allow the reader's eyes to go nodding up and down, like a swing-beam. This has been my fate in reading your writing. As the lines lie ladderwise, I was obliged to go from one to another, to mount up to the end of the last; then, when no connection was to be found, I had to go back and seek for the right order again, retreating and following the furrow, like Theseus, in the story, following Ariadne's thread. Write straight, and do not confuse our mind by your slanting and irregular writing."—From *Nicene and Post-Nicene Fathers*, edited by Schaff and Wace, vol. viii, p. 320.

Studies in Education

II.



STUDIES IN EDUCATION

EDITED BY

EARL BARNES,

Professor of Education in Leland Stanford Junior University.

AUGUST, 1896.

	PAGE.
THE DEVELOPMENT OF THE HISTORICAL SENSE IN CHILDREN (Part I)—Mary Sheldon Barnes	43
CHILDREN AND GHOSTS—Louise Maitland	53
REMINISCENT STUDY: II. MEMORIES OF THINGS READ—Agnes Sinclair Holbrook	58
THE STORY OF BLUEBEARD (Illustrated)	62
TWO LITTLE GIRLS' STORIES	65
BIBLIOGRAPHIES OF CHILD-STUDY—Earl Barnes and C. J. C. Bennett	68
DISCIPLINE; II. WHAT TO READ—Earl Barnes	71
EDUCATION AS SEEN IN AZTEC RECORDS—Earl and Mary S. Barnes .	73

VOL. I,
No. 2.

STANFORD UNIVERSITY.
1896.

\$1 a Year.
15 c. a Copy.

STUDIES IN EDUCATION.

These studies begin with July, 1896. They will be continued as a monthly publication for ten numbers. The last number will contain an index, and a full table of contents. The cost for the year is one dollar, or fifteen cents a number. Address all inquiries or subscriptions to

EARL BARNES,
Stanford University,
California.

THE HISTORIC SENSE AMONG CHILDREN.¹

MARY SHELDON BARNES.

What is true of the historic sense among children? Thanks to the kindness of the superintendents and teachers of Oakland, Santa Rosa, Napa, and Santa Paula, California, we have been allowed the opportunity to examine some 1250 school children, in order to answer this special inquiry.

The first test was given to discover what questions children would spontaneously ask if given a story without a date, a place, a name, or a moral. This test is supposed to throw light upon the comparative curiosity of children as to personalities, time, cause and effect, and truth. The story was the following, given *verbatim*, without remark on the part of the teacher, the children writing down the questions they would like to have answered:—

There was a king who had a beautiful wife whom he dearly loved. But a fair prince came and took her away to a far country. Then the king and all his men went to fight the prince, who lived in a great city all walled about with stone. For many a day the king and his men tried in vain to enter it; but, at last, by a clever trick, some of his men got into the city, and burned it to the ground; and so the king got his wife once more.

The following sample lists of questions, printed exactly as worded and spelled, will give an idea of the sort of returns which we obtained:—

1. *Average set from boy of eight.*—How did the king get his wife when town was burning, wouldn't she get burnt? Did the first king fight with the second? Why did the second king want wife. Did the First king go strait after the other king as soon as he got the wife? Did the king weep.

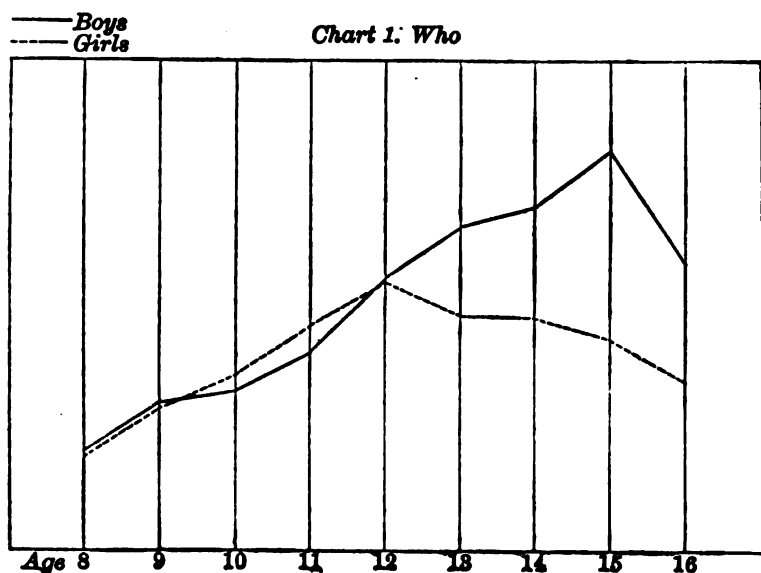
2. *Average set from girl of nine.*—Did the king have a beard? How many years was the king married when his wife was taken away? What kind of a dress did the wife wear when she was married? What was the name of the city that the prince lived in? What was the name of the stone that was put around the great city? What was the name of the prince?

¹ Reprinted and abridged from *Studies in Historical Method*, by Mary Sheldon Barnes. D. C. Heath & Co., Boston: 1896.

3. *Very complete set from girl of ten.*—What was the skillful trick done? What did the second king want with the first king's beautiful wife that he took her to a far country? Was the wife vain of her beauty? Was she kind and good to her husband? How long did the king fight to get back his wife? Where was the wife when they were fighting? Where was the first king when the second king was stealing his wife? Could n't the king see the other taking her away? Or was he not strong enough to fight the king? Or was it night? Was it night or daytime when the soldiers burned the city? In what year was this when they fought? How long was it before he commenced to fight? Did the king cry or feel sorry when he found his wife taken away? What were the two kings names?

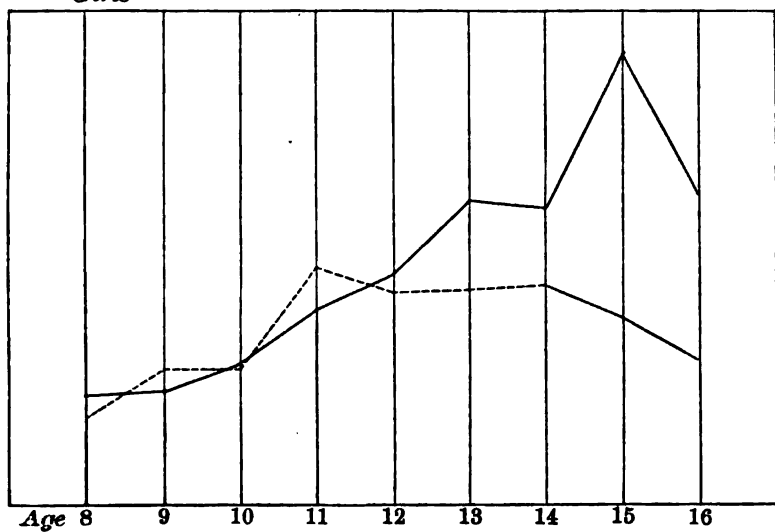
4. *Average set from boy of thirteen.*—Where did the King live? What was his name? Over what country did this King reign? What was the Prince's name? Where did he take the King's wife? What kind of a trick did the King's men make up to get into the city? Is this Story a fable? What did the Prince take the King's wife for?

On collating the answers, we found that they classified themselves under the headings, — *who, where, how, why, result, personal detail and feeling, general detail, ethics, time, number, truth.* The larger results of the collation appear in the accompanying charts.



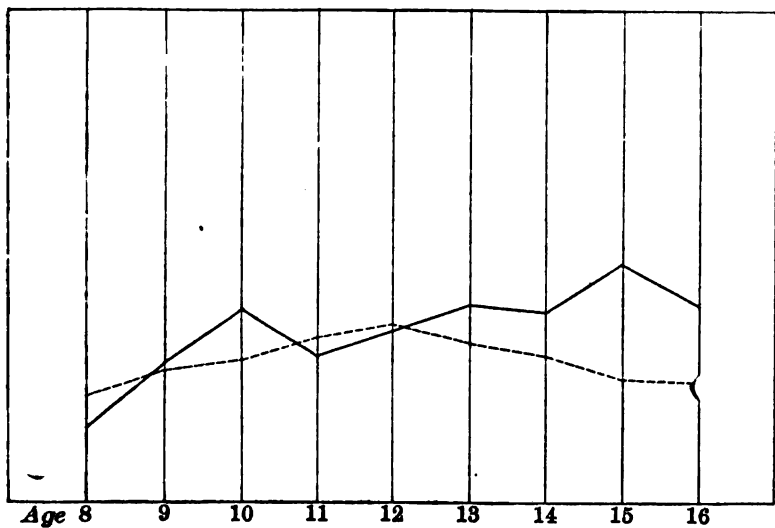
— Boys
- - - Girls

Chart 2. Where



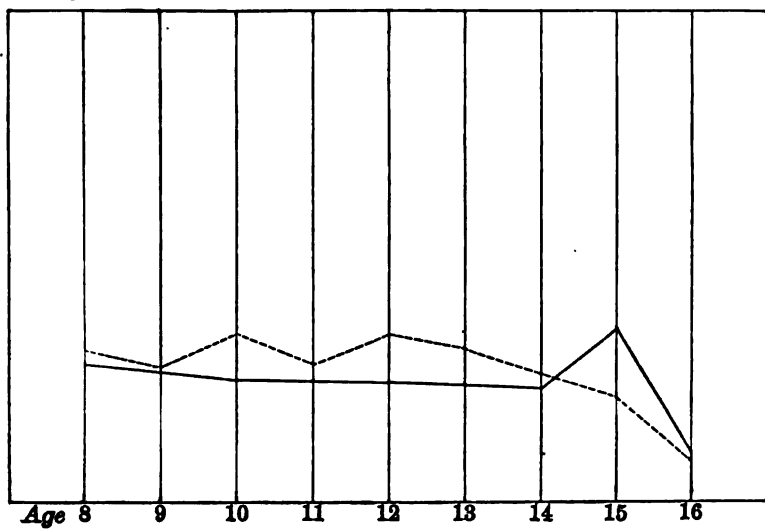
— Boys
- - - Girls

Chart 3. How



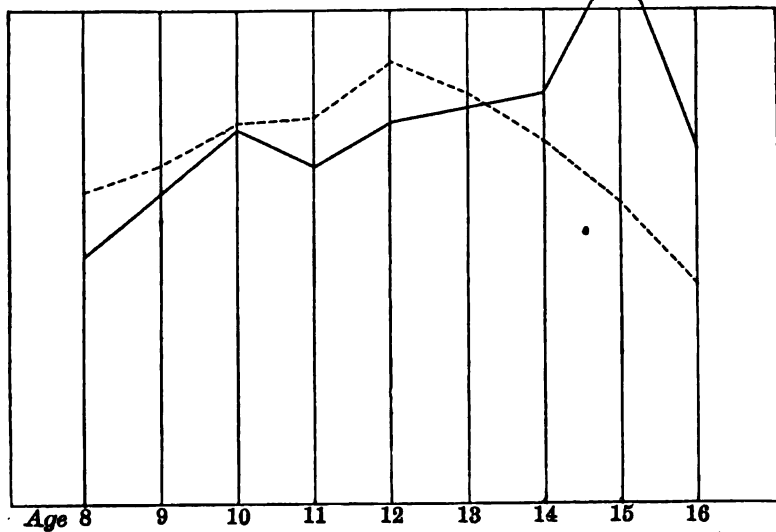
— Boys
- - - Girls

Chart 4. Why



— Boys
- - - Girls

Chart 5. How Why Result



On examining our catch, we note the following phenomena: that the bulk of the questions appear under the rubrics of *who*, *where*, and *cause and effect*; *how*, *why*, and *result* being massed under this latter heading. Of the three, *cause and effect* lead in point of interest; *who* comes second, and *where* follows as a close third. The interest in time is comparatively slight, but very steady. The same is true as to the interest in the truth of the narrative. The interest in general and personal detail is very much less than one might previously expect. The main interest, after all, follows the strong lines of action, and asks for a clear presentation of persons, places, relations of cause and effect; to which may be added in due but slight proportions, time, ethics, expansive detail.¹

This point of interest has also been examined in our experimental school at Stanford in another way. A new story was told the children, containing all the above particulars, fully expanded. After the lapse of a week or two, the children were asked to reproduce it. The result of this test was very confirmatory of the test of the tale of Troy. A full account of it is given in the special study on the historic memory of children, by Miss Anna Köhler.²

Not only does this test reveal the comparative interest in historical elements, but it seems to indicate certain sex differences in the matter of curiosity. Boys appear more curious in regard to *who*, *where*, and *how*; girls show a greater curiosity as to *why*; and the curiosity of boys, with this one exception, is not only greater than that of girls, but culminates later. In regard to matters of time, truth, and general detail, we cannot see any difference between the sexes.

In order to make a special test of the power of inference, the children were asked to write down their answers to the following question:—

If you were shipwrecked on an island in the middle of the sea, and you found, in one corner of the island, an old house of logs and part of an old wooden boat, with broken arrows in the bottom of it, what would these things tell you?

¹ Since these tests were made, two new studies have been made which throw a decided light upon the interest which children have, not only in persons and places, but in names as such. Clara Vostrovsky, in a study on children's own stories (see July number of the *Studies*), and Agnes Holbrook, in a study on memories of things read (see p. 60), both found names to be a very prominent element. This relates itself, again, to the interest which primitive peoples have in names, and the great importance they attach to them. This is a subject which will repay further investigation. The indications are at present that names should by all means be emphasized in our early historical work.

² See *Studies in Historical Method*; M. S. Barnes. Heath & Co., Boston: 1896; p. 82.

The following are typical examples of our returns:—

1. *Inferences of a boy of eight.*—If you was shipwrecked on an island you would be in a fix. Were there Indians on the island. and Soldiers might have been on to.

2. *Inferences of girls of nine.*—(a) If I saw a house on the island it would show me someone lived there; and if I saw a boat I would think it was a fisherman's house, and the broken arrows looks like the fisherman had been whaling. (b) The old boat I would of taken away and form the house some logs to fix the bottom of the boat and sailed to shore but if the tide was to high I would of taken the logs of the house and build it higher so as not to let the waves get over the boat and with the rest of the logs made oars.

3. *Inference of girl of thirteen.*—If I were shipwrecked on an island in the middle of the sea, and found a log house and part of an old wooden boat with broken arrows in the bottom of it, I would think that many years ago, some one had been cast on the island and built himself the house. For the presence of the arrows, I would account by saying, that part of the crew of a ship had gone on an island, for the purpose,—as the captain thought,—of gathering cocoanuts, but in reality of planning how to take the ship. One man, suspecting their intentions, waits till they have gone into the interior of the island, then springs into the boat, reaches the island in safety; and, having found out the mutineers' plans, is about to return secretly to the ship, when he is discovered, and pursued. He reaches the water's edge, jumps into the boat, and escapes the flying arrows shot after him. Darkness falling, he cannot determine the position of the ship, and after being tossed for a few days on the waves, he reaches this island, builds himself a house, and lives here until he is rescued by a passing ship.

4. *Inferences of boys of twelve and thirteen.*—(a) If I was shipwrecked on an island and saw these things they would tell me that some man many year's ago was shipwrecked and had built a hut to live in. He built a boat and very often went out for a sail. One day when he just pulling in his boat, a band of indians sprang out from the bushes and sent a volley of arrows at him. The only weapon he had was a revolver, running behind a tree beat them back. A few days after thinking all was well he launched his boat, when, as suddenly as before a much greater body rushed in on him. Before he had time to load the indians had sent hundreds of arrows, he fought bravely with sticks and stones but it was no use and was soon killed and his body taken to another island and eaten. (b) These things would tell me that somebody had lived there a long time ago. I think that they had been partly civilized because the log house would be made by a civilized person. The arrows might and they might not indicate that they were savage because people a long time ago used arrows before guns were ever thought of.

5. *Good critical inference of girl of fifteen.*—That somebody had been there before me. That they must have been there a long while ago.

That they must have been warriors, or else contended with some people who were warriors. That they knew how to build houses out of logs, and must have had something to cut the trees down with. That they knew how to build boats, and had probably explored a little in one. That they must have known how to cultivate the land and to raise grain or such things.

6. *Good critical inference of boy of fifteen.*—It had been inhabited by Indians. That they knew something about houses. That they knew how to make boats. That the island had trees on it. That they had no fire arms. That the people had tools.

Every one of these papers would repay critical, individual study; but, looking at the mass, the inferences class themselves under the following rubrics:—

1. As to persons formerly on the island,—shipwrecked, savage, civilized; indefinite, special, and imaginary characters. 2. As to the house,—built, found. 3. As to the boat,—built, used for hunting or fishing, used for pleasure, brought people to shore. 4. As to the arrows,—made, used in fighting or in hunting. 5. As to the desertion of the island,—on account of violent death, departure, natural death. 6. As to time. 7. As to a personal relation to objects. 8. Imaginary inferences. 9. Miscellaneous.

The accompanying chart, No. 10, shows the result of this test as to the number of inferences made. It will be noted that this number rises decidedly at the ages of twelve for boys and thirteen for girls, to an average which is kept fairly steady within the ages examined, with a constant tendency to rise, which calls for further investigation within the higher ages. As to the character of inference, chart 11 shows the number of legitimate inferences decidedly pronounced at twelve for boys and thirteen for girls, and this development continues fairly steady, with some superiority on the side of boys, until the age of fifteen, thus supporting the curves showing number of inferences.

Aside from the common, legitimate inferences, such as,—Some savage race must have lived here because there are arrows, there are three classes of inferences which deserve special attention: The personal, as in examples 1 and 2 *b*; the imaginative, as in examples 3 and 4 *a*; the critical, as in 4 *b*, 5, and 6.

One may say that the personal inference, strongest with young children, disappears, to all intents and purposes, by the age of ten or eleven. Even at the age of eight it does not compare with the impersonal and legitimate inferences.

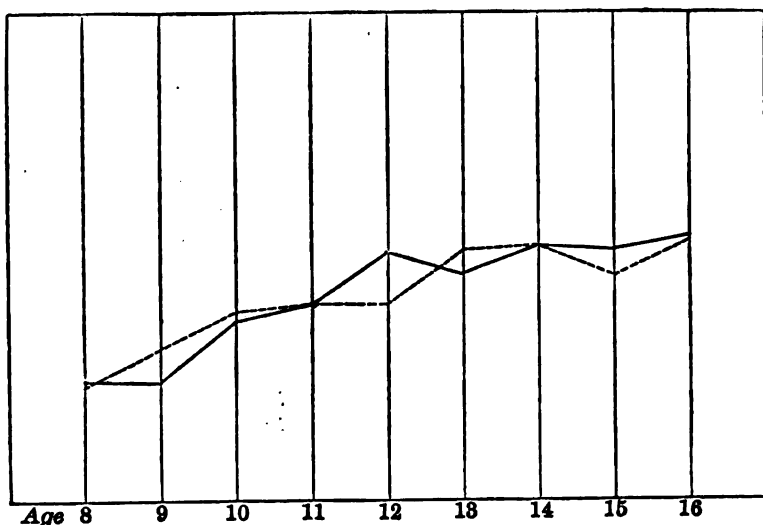
The appearance of imaginative inference, as we might expect,

follows the general rule for inference, developing strongly at eleven with boys, and steadily increasing with girls, with no marked variation. (See Chart 12.)

The cases of violent death may also be taken as inferences which show the presence and development of the fancy. The legitimate inference is that the people have disappeared in some way: without further evidence, we cannot say how; and if we do say how, as that they were killed by savages, or starved to death, or drowned,

—— Boys
 - - - - Girls

Chart 10. Number of Inferences



it is by force of fancy. The series of figures for this particular run as follows:—

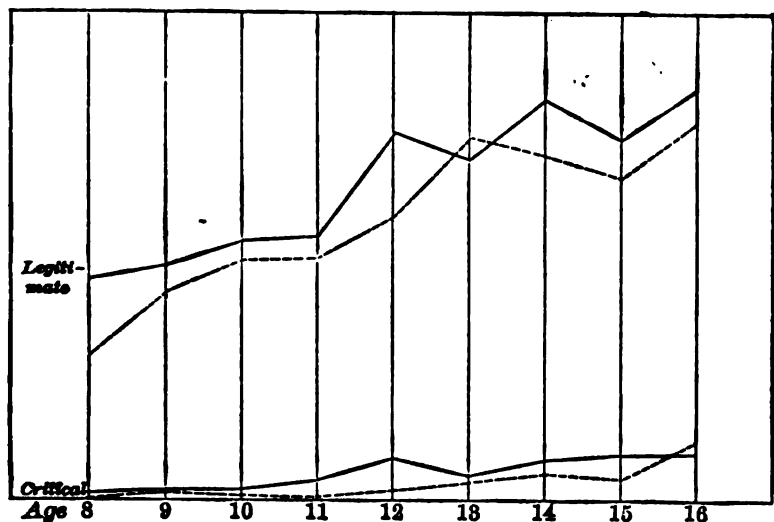
Age	7	8	9	10	11	12	13	14	15	16
BOYS	0	0	33	67	120	230	224	220	264	250
GIRLS	0	75	64	68	91	125	126	121	180	75

This series confirms the notion that the imagination and the power of inference run parallel. Here, again, we find a series increasing up to the age of sixteen, more regularly but less strongly with girls.

As for critical inferences, such as we find in examples 7 and 8, their number is small; and, within the ages examined, the boys are slightly but distinctly superior to the girls. (See chart 11.)

One day we tried this same test orally in the experimental school at Stanford. I had expected interest from my former experience, but I was greatly struck by the eagerness which the children displayed. It was as if I had opened a gate, and they ran wildly out hither and thither, making new discoveries. They not only wanted to tell me that there were people who lived there before,

— Boys *Chart 11. Legitimate and Critical Inferences.*
- - - Girls



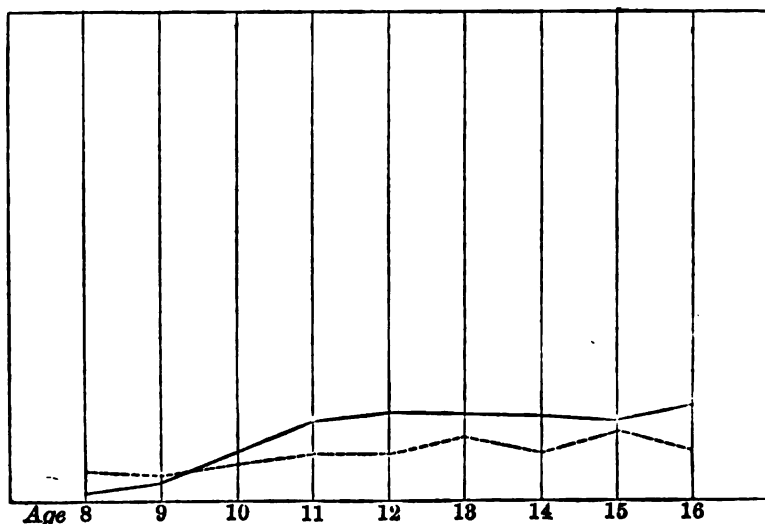
but that they were civilized, that they fished and hunted, and went in boats on the sea. They also wanted to tell me how they might have disappeared,—by drowning, starvation, or slaughter. One boy said that perhaps we could find their bones, and then we would know how old they were. I assented to this, and happened to speak of the teeth, whereupon another boy capped the climax by saying quite soberly that perhaps they had false teeth. Their minds simply ran from inference to inference without effort, but with very little critical power. These children were mostly below twelve years of age.

Summing up our evidence as to inference, then, the power is present at the earliest age examined; it develops strongly into legitimate and imaginative inference at the ages of twelve and thirteen. On the critical side the power is rare, but, when present, clear and strong from the age of thirteen upward.

In general, I have noticed this point in regard to this study in inference: that the power to infer varies greatly from school to

—— Boys
 ---- Girls

Chart 12 Imaginative Inference.



school; from which I take it that inference is subject to great modification by teaching.

A study by Mr. M. A. Tucker, of Stanford University, on this same subject, shows that doubt begins to show itself about the age of thirteen, which is another way of saying that criticism begins at that age. His work also confirms the observation that personal inference ceases about twelve or thirteen.

(Concluded in the September number.)

CHILDREN AND GHOSTS.

LOUISE MAITLAND.

Fifty-two boys and girls, from seven to fifteen years old, living in a California orphanage, recently wrote out their answers to the question, "What would you do if you saw a ghost?" Their answers bear strong internal evidence of spontaneity, and of an honest endeavor to be frank and truthful, only one paper being in any degree flippant in tone. The following table shows some of the collated results:—

Say there are no ghosts	4	
They would do nothing		3
They would examine ghost.		1
Say it is the Holy Ghost.	3	
Would say prayers to it		2
Does not say he would do anything		1
Say they would run away	44	
Say they would simply run away		7
Say they would try to injure ghost		18
Say they would be afraid		13
Say they would hide		6
	51	= 51

To express it differently, four children say there are no ghosts, and three of them, would therefore, do nothing; the other, a boy of fifteen, while denying the existence of ghosts, says: "If I should see a ghost, I would go up to it and see what it was."

Of forty-four children who say they would run away, seven would simply run away; thirteen would suffer with varying degrees of fear, from "being afraid" to "being scared to death"; six would try to hide; eighteen, while declaring that they would run away, nevertheless declare that they would try to fight, shoot, scare, or injure the creature in some way. A boy of nine says: "If I saw a ghost I would run away, if it was in the middle of the day; if it was in the night, I would kill him."

Three believe that it could only prove to be the Holy Ghost,

and they would say their prayers to it, one adding that he is a "holy spirit" and a "good man."

Five children describe what the ghost could do to them. He could scare them by vanishing; he could eat them up, or catch them. Possibly this last item explains the frequent mention in the papers of long outstretched arms and bony fingers.

A second set of papers, from the same fifty-two children, shows the intellectual belief, contrasted with the emotional belief. They were asked, after a day or two, Do you believe in ghosts? What do you think they are like? Where and when did you first hear of ghosts?

In these papers thirty-nine children declare that they do not believe in ghosts, while twelve admit that they do, though of these twelve, three specify that it is the Holy Ghost they believe in.

Out of this large number of children who, according to their own explicit statement, do not believe in ghosts, five say that ghosts are like nothing at all; two that they are imaginary creatures; and eight liken them to men in white clothes,—thus giving fifteen whose later statements bear logical witness to the truth of their earlier statement, that there are no ghosts. The rest of the children, however, without any apparent sense of incongruity, describe the ghosts that they have just declared do not exist. One child says a ghost is like a lady in white; four that they are like statues; nine that they are white, or very white, things; with two they resemble animals; three think they are like skeletons; six like returned spirits; one thinks that a ghost is like a shadow; four liken them to fairies; one imagines them as very wild; one says they are like God; eight say they have the power to catch, or kill, or scare you; and one thinks they must live where there is snow.

The ages at which these children first heard of ghosts are specified by one as three years; one, four years; one, five years; eight, six years; five, seven years; three, eight years; one, at nine or ten years; and eight say they heard of them when they were small; while five say that they never saw one, and four that they never heard of them.

Of the fifty-two children, forty-four mention the sources of their information; thirteen say that they first heard of ghosts at home; four were told by their mother; one child says its mother had seen them; two heard of them from their father; one from a sister, who

wished to scare him,—making twenty-one in all who heard of ghosts at home; one had heard of them at school; fourteen in some city or town; one from a teacher; and one had heard of the Holy Ghost in the Sunday-school. Books were the source of information to five; and one child says he heard of them at home at night.

The papers chosen for illustration of some of the points touched upon, as they at the same time suggest other interesting features in the children's methods of thinking, have all been massed together to avoid repetition.

One boy of ten well illustrates the way in which a child's thought unfolds as he writes, thereby drawing him into endless contradictions. "If I saw a ghost," he says, "I would get afraid of him and run away would you run away if you saw a ghost or would you stand and fight him there is no true ghost in the hold world I would fight a Ghost if I saw one." A boy of eight naïvely betrays himself when he says: "I do not believe in ghosts, they are a thing that scares me. I never heard about ghosts." A boy of twelve says: "If I saw a ghost I would say my prayers because he is the holy Ghost the holy spirit two the holy gose is a good man he give us are food to eat and are blankets and clothing I will thank the holy Ghosts when I say my prayers at night & when I get up in the morning just the same way but I will thank him for my food and for my nights sleep he makes the frute trees grow big and green and makes the plant grow big." These papers show a confusion in names and theological tenets not unnatural under the circumstances.

The state of uncritical and unquestioning acquiescence to authority of which the youthful mind is capable, is shown by a boy of ten: "Yes, I believe in a ghost. I think it is true do you think a Ghost is a creture that can appear in front of you my mother told me about then a ghost is a creture that is very white sometimes they run away with you if they see you I would run if I saw one, they can catch you if you come near them they are very wild creture."

Some of the children use picturesque and vivid details, bringing graphically before one's mind the ghostly appearances they describe. A boy of thirteen writes: "I do not believe in ghosts because I think people go eather to Heaven or Hell when they die. I think they are like human skeletons dressed in flowing white or gray robes. There is a ghastly light in the skull, which glimmers out

through the sockets and front between the jaws." Another one, of eight years, says: "do you believe in ghosts? Yes. I think they are man and they are thean and you can see his bones. What do you think they are, they are tall gosts and they have thean hands and feet." A girl of eleven, says: "I don't believe in ghosts. I think they are people who died and then they come up out of their coffin and knock at everybody's door. I heard about ghosts long ago my mother told me about them. She said she seen them."

The papers are full of conscious or unconscious humor, as in this one, from a boy of thirteen: "If I saw a ghost I would fight him until I killed him. If he killed me before I killed him I would let him go." There is a certain sense of magnanimity and fair play about this boy which is pleasing, if his reasoning is tinged with a proverbially Irish quality. Another boy, also thirteen, is very candid with himself, and shows a humorous appreciation of and resignation to the state of doubt in his mind: "I would try and stand up to it *if* I did not run away."

In this study, we see some general tendencies that appear to characterize children's ways of thinking and writing.

In the first set of papers, we find what would be the motor response of the children, and, in the second, the intellectual attitude and the emotional response. Strictly speaking, of course, the three overlap, but for practical purposes we may deduce, roughly, three general results. In the first place, children express their motor or felt belief by the effort they would make to remove themselves as speedily as possible from the source of possible danger; in the second place, they prove their intellectual respectability by saying they do not believe in ghosts; and, in the third place, they show their emotional belief by their attempt to describe concretely the vague, mysterious, and uncanny nature of the object of this belief. This struggle for intellectual respectability, in the face of deep-seated and widely felt belief is an interesting feature in this little study.

The age at which the children say they first heard of ghosts does not probably amount to very much, excepting in as far as it conveys the idea that they feel themselves to have been very young at the time.

The large total, comparatively speaking, of children who learned about ghosts at home is somewhat striking. It may show that this particular superstition is more generally prevalent and

liable to be talked about by adults than are the other forms of superstition. In a study made by Miss Vostrovsky,¹ she found that superstitions were generally learned by children on entering school and mixing more freely with other children. Indeed, the question in this study was put with the idea that such would also prove to be the case in this instance.

The power to hurt possessed by ghosts does not figure largely, and where it is expressed it is very vague, agreeing in this with earlier studies on fear. The questions asked did not especially call for an answer on this point, however.

Judging from this study, we find that only in a very few instances have the children risen to the generalization that we cannot describe what we do not believe to exist. They have not seen the logical sequence of the whole subject. They have thought in disconnected fragments. They have said they do not believe in ghosts; nevertheless, ghosts have an acknowledged objective existence in their minds. They say: "Of course, I don't believe in ghosts;" "they are just a josh to frighten people with,-- but ghosts are queer things, anyway;" "they are like men; but you can see their bones, and they are very white;" "and they can eat you; and catch you,—and disappear all of a sudden; and I don't like the devel." All these statements appear in the papers in conjunction with the assertion, "I don't believe in ghosts." It is, perhaps, fair to say that the children have told us what they do think, and, also, what they want to think, without concerning themselves, with what they ought to think, in order to appear logical. They do not really contradict themselves, but they show us opposing thoughts, held simultaneously and disconnectedly in their minds.

Does this way of thinking hold good for all children? The working up of a very large number of equally spontaneous answers, from children seven to fifteen years old, may help us to arrive at a definite and trustworthy conclusion.

¹ Miss Vostrovsky's study will appear in a later issue of these *Studies*.

STUDY IN REMINISCENCE.

II. MEMORIES OF THINGS READ.

AGNES SINCLAIR HOLBROOK.

The following generalizations are based on one hundred and one papers written by members of a class in "Psychology of Childhood," in response to a request for "an account of vivid early memories of things read." An examination of papers of so general a nature is calculated to give rather a vision of the possibilities along this line of study than a skeleton of actualities. Some few facts are, however, of probable value in themselves.

SUMMARY TABLE.

A. Character of Memories —

None, 2.
Not vivid, 11.
Vivid, 24.
Permanent, 16.

B. External Circumstances —

Age, 61.
From 4 to 5, 16.
" 5 to 6, 14.
" 6 to 7, 11.
" 7 to 9, 10.
" 9 to 12, 10.
Place, 11.
School, 4.
"By a window," 3.
Miscellaneous, 4.
Time, 16.
Evening, 12.
Sunday afternoon, 4.
Sound, 7.
Music, 4.
Rhyme, 1.
Miscellaneous, 2.
Sight, 22.

Pictures, 22.
Color, 9.

C. Subjects —

Children, 36.
Animals, 23.
Fairies, 15.
Ghosts, 1.
Bible stories, 14.
Poems, 6.
Adventure, 5.
History, 4.
All kinds, 3.

D. Sources —

Story-books, 12.
School-books, 7.
Fragments, 4.
Christmas tales, 2.
Periodicals, 2.
Newspapers, 1.

E. Points Remembered —

Titles, 33.
Names, 24.
Pathos, 12.

Unusualness, 12.
 Characters, 11.
 Morals, 10.
 Danger, 8.
 Action, 8.
 Outdoor world, 7.
 Horror, 6.
 Æsthetic detail, 4.
 Language, 4.
 Quoted speech, 2.
 Anger, 1.

F. Personal Attitude—

(a) Pure feeling.
 Sympathy, 22.
 Sadness, 18.
 Gladness, 8.
 Wonder, 7.

Fear, 7.
 Hatred, 5.
 Love, 4.
 Crossness, 1.

(b) Feeling turning toward
 conduct.
 "If it were I," 16.
 Emulation, 6.
 Desire to be good, 5.
 Revolt against "good," 3.
 (c) Intellectual activity.
 Imagination, 5.
 (d) Conduct.
 Imitation, 5.
 Concealment, 2.
 Pride, 1.

As to the character of the memories in question, only two papers say no such memories can be recalled, and, out of eleven which state that they were not in general distinct, the majority mention that one or two stories stand out clearly. Twenty-four speak of the startling vividness of these images, and sixteen assert their permanence in phrases of such vigor as "even now," "ever since," "to this very day."

As to external circumstances, age is of questionable value, and is difficult to interpret in this as in other reminiscent studies. People think they are "about five or six—at any rate, quite little," in a most indefinite way. About all we can conclude is that possibly the first vivid memories of things read begin to form in the average mind between four and six or seven years of age. Place is mentioned eleven times, and time sixteen. Evening appears the most impressionable season, especially if accompanied with silence and open fire crackling on the hearth. Sound is referred to in seven instances, and sight in twenty-two. Music and rhyme do not appear conspicuous, but illustration, especially if colored, contributes substantially to strengthen ideas.

Taking it for granted that children read and hear read a great variety of stuff, it is certainly noteworthy that they remember chiefly things about children. Whether or not we may from this conclude, "The proper study for the child is children," we must grant place to one more slight piece of evidence that

the child lives in a world of children, where animals take second place, and fairies hold their own, but grown people have slight recognition. Bible stories are separately listed; but here again animals are prominent, the favorites being Daniel's lion, Jonah's whale, and the memorable procession of Noah. Poems are not in high favor, and tales of adventure and history hold no important place. Only three papers claim omnivorous taste in reading.

It is a comment on our reading texts, that among the sources for memorable scenes, school-books are seldom mentioned.

Among the points noted as memorable, book-titles are given first place, and names second, while characters themselves come fifth. The element of the unusual, or contrast with the ordinary, is recognized here, as in other studies, to be large — it perhaps enters into proper names, also. Whatever may be the psychological explanation of children's genius for nomenclature, its pedagogical value is clear. Other studies bear out the present one in indicating that there is a time in early childhood when names are the tangible handles by which the world is grasped. Pathos is the most popular among the emotions, and anger appears but once. *Æsthetic* detail is slight, and morals would hardly seem to yield adequate return for the time and effort generally put upon them. The comparatively modest place held by the outdoor world, and the large part played by animals in these memories, seem inconsistent facts. It is possible that zoölogy has a legitimate claim over the other natural sciences in education,— at least, in point of time.

One readily sees the personal attitude to be oftenest one of feeling, where sympathy and a sadness frequently called "fascinating," take the lead, and the passions of fear, hatred (always for the villain), and crossness, usually attributed to the natural man as more primitive, form but an insignificant group. Wonder, perhaps the most undifferentiated state of all, is seldom recorded; while love, except as expressed in sympathy, is hardly noted. *Gladness* follows in almost every instance upon the suspense of the crisis, and might be more truly called *relief*. Imagination is noteworthy as the only personal reaction in which intellect is the leading force. Conduct is also conspicuously weak, but a respectable group form what an optimist might regard as a connecting link between feeling and incipient conduct.

On the whole, the most striking features of these papers are that

stories about children and animals seem to be chiefly remembered, titles and names are the points oftenest retained, and feeling predominates among the personal reactions experienced.

Observations of fifty-three stories written by children themselves¹ leads to some identical and some diverse conclusions. Miss Vostrovsky says: "Stories for children should be true stories of child-life, dealing with the holidays and other rather unusual events. The story should be mainly confined to action, with little description of persons or feelings. Æsthetic details and moral rules should play an insignificant part. Then, too, persons and places mentioned should have definite names attached to them."

The large share claimed by feeling in this and other reminiscent studies, contrasts strikingly with the absence of emotional expression in children's own papers. Correspondingly, the predominance of action in children's lives and interests contrasts with the insignificant record of action in reminiscent papers. Emotion, if as real to the child as to the adult's memories of childhood, is at least less conscious, while action is to his memories less vital. Perhaps we may take our cue from the psychologist who defines poetry to be 'remembered passion,' and conclude that feeling finds expression in words rather as a memory than as a living fact.

¹ A Study of Children's Own Stories, by Clara Vostrovsky. Pacific Journal of Education, August, 1894. Reprinted in Studies in Education, July, 1896.

THE STORY OF BLUEBEARD.



COMMENTARY ON THE PICTURE.

This picture was drawn by a good-natured, rather careless Irish boy of eight in a Napa school. It illustrates the first period in the drawing of picture stories where the child tries merely to represent all the elements involved in the story, with little or no regard to sequence or other relation. It may be described as the cataloguing period. Much of the art in our periodicals does not rise above this plane; as, for instance, where we have an article illustrated with the picture of Abraham Lincoln when he was a child of five; the house where his father died; the gun that belonged to his wife's father, etc., etc. In this picture the details are written down as one might write a list of words. Facts of perspective give way to the desire to state each fact. You see the legs of the brothers through the horse, the people through the house, and Bluebeard through the hearse and the coffin. It is not pictorial representation that the boy is after, but it is picture-writing, an enumeration of catch-words in the story. This is still further shown in the use of the conventionalized figures. The horse is made exactly like the sheep, except that he is larger and has an eye; the women are all reproductions of a form used on the blackboard for number story-work. The pictures of the men agree with our study of last month, being all full-face, except the conventional woman, who is borrowed ready-made from the blackboard exercises.

Concerning details, it is interesting to note that only those details which make action effective or possible are drawn; thus, the boy who drives the sheep has a whip; the door of the closet has a handle; Ann has something in her hand to wave as a signal; the hearse has a tongue with a cross-bar; I fancy that the foremost brother has also a whip. Aside from this, the pictures are made simply and directly to illustrate the point; thus, in scene I, nothing appears save Bluebeard and Fatima, although we might reasonably have expected to see also a key. In scene II, we have only Bluebeard, Fatima, and the saw to cut her head off with; in the third, Ann on the roof with her signal. The only unnecessary details in these three scenes are the chimney which smokes, and the window, which are both probably symbolical of a house, and which would perhaps appear in every picture which this boy might make of a

house. In the closet scene, the brother scene, and the sheep-boy scene, the same things may be noticed,—nothing unnecessary, while symbols, almost hieroglyphics, stand for men and animals. The only exceptions are the eye of the horse and a third pair of legs, which may be a concession to the feeling that a horse is somehow different from and more important than a sheep. The same observations apply to Bluebeard in the hearse; it shows us nothing but Bluebeard in his coffin in the hearse, but in order to label them, Bluebeard's beard is pictured, and the hearse has plumes. One notes also that every personage and every action in the story appears in this rude picture-writing.

Relations of time and place are generally ignored; thus, Bluebeard is walking about in the presence of his own corpse; the brothers and the sheep do not appear within the range of Ann's vision, and the closet is outside of the house altogether, while scenes I and II are both taking place simultaneously on the ground-floor of the house. The gruesome details of the closet and the dead Bluebeard receive ample treatment.

One cannot help wondering why the horse has six legs while the sheep have but four, and whether the hearse was drawn first or last.

See also, for direct studies on children's drawings:—

Studies in Education for July, pp. 22–23.

Note sur les Dessins d'Enfants. Par M. Passy. In *Revue Philosophique*, vol. xxxii, p. 614. Reviewed in the *Pedagogical Seminary*, vol. ii, p. 276.

Studies of Childhood. By James Sully. Chap. ix. New York: D. Appleton & Co. 1896. Published earlier in the *Popular Science Monthly*.

Drawing in Primary Schools. A study in practical psychology. By T. G. Rooper. New York: E. L. Kellogg & Co. 1894.

Notes on the Development of a Child. By Milicent Shinn. Vol. i, p. 96. Berkeley, University of California: 1894.

What Children Draw to Please Themselves. By Louise Madeline Maitland. In the *Inland Educator*, September, 1895.

How Children Draw Objects Placed Before Them. By A. B. Clark. Pamphlet, privately printed. Stanford University: 1896.

The editor will be grateful for further references.

TWO LITTLE GIRLS' STORIES.

III.—AS DICTATED BY BARBARA.

"There was once a monkey and they let him loose for he was a good monkey, and he climbed up on the porch and could not get down. Then he saw a bird coming along and then he asked the bird whether he would help him down. Then the bird said, Yes, if you will get me some straw and cotton all mixed to make a bird's nest. He said, Yes. So the bird helped him down, and he got some straw and cotton to make a bird's nest. Then he asked the bird to live with him, and the bird said, Yes, if you will get me some flour and dough to make bread with; and the bird said that then he would stay and live with him and cook for him. So the bird stayed, and the monkey went and got an egg for the bird. The egg was up in his room, for the monkey was a good monkey and very kind to the chickens, so that the chickens came up and laid their eggs in his room."

—*By a girl four years old.*

IV.—AS TOLD BY MINNA.

"Once upon a time [When asked to tell what 'once on a time' meant, she said it meant 'one time']. I stood two kittens upon the table, the door was open, and everybody was gone out. There was something to eat upon the table, and they were sitting upon the table eating, eating, and somebody came in. They shook the table and they all went over, and the little girl was *so* frightened! And the little girl went into her room and cry, cry, cry, and mussed her things up. And her mamma came there and scolded her; and when her mamma scolded her she went outside and cry, cry, cry, and she didn't come in the house for four days. Her mamma called her for dinner one day, and she didn't come in, and she stayed out all day."

What would the little girl have liked her mamma to do?

"Be kind to her."

How would she be kind to her?

"Just pat her hair, this way" [illustrating].

—*By a girl five years old.*

COMMENTS, SUGGESTIONS, AND QUESTIONS ON STORIES III AND IV.

The first story was told by a little American girl, four years old. The monkey, the porch, and some talking parrots were parts of her home environment, and experiments had been made on the monkey with eggs. The story shows some familiarity with the habits of animals, and the somewhat absurd relations between the monkey and the bird may be due to the fact that the monkey lived with the parrots in a basement room of the little girl's home. Do children's stories tend to reproduce the exact environment around them, or does the environment simply suggest details? This story deals entirely with objective details, and in its orderly sequence shows a good deal of logical power for a girl of four, especially in her attempt to find a cause for the effect in the last sentence. Stories at this age are generally very fragmentary and incoherent. Here each sentence suggests the next in a way that is characteristic of all similar stories. Children do not see the whole, at first, but start out, and each sentence suggests the one to follow. How could the bird help the monkey down? Was not the fact that the bird could so easily get down itself transferred over to fit the monkey's case in some vague way? The idea of mutual aid as the basis of living together, shows a certain recognition of the inevitable foundation of social life.

The second story was told by a little Japanese girl five years old, who attended our kindergarten. She is an extremely lovable child, always gay, and very docile. The story was taken down by a stenographer, who had no idea of the use to be made of it. It is a remarkable one for a young child to tell, on account of its dealing with subjective matter. It is a most child-like performance; there is no thought of consequences until consequences happen; then there is no attempt to correct the harm, but the child simply cries, and "musses her things up." Does this "mussing her things up" come from a primitive feeling that makes early people tear their clothes, wear sackcloth, and put ashes on their heads; and does it not all rest in a desire to awaken sympathy in the beholder? The act completed and judgment passed, the child wants sympathy and kindness, and considers them her due. The element of rhythm is very marked in this story. Note that almost every sentence is composed of three short clauses that read with a natural swing. "Upon the table" is repeated in a way to give rhythm to the early part;

separate words are also repeated, ("eating" and "cry"), with a tendency toward groups of three. The little girl has strong artistic sensibility, excellent taste in color, and deftness in handwork. Is not the whole story characterized by a sort of artistic sensitiveness?

In one of his clever essays, Mr. Brander Matthews tells us there are four stages through which fiction has thus far passed,— the impossible, the unusual, the probable, and the inevitable. Much of the folk-lore of all countries, and such tales as the *Arabian Nights*, belong to the first class; *Don Quixote*, *Robinson Crusoe*, the tales of the elder Dumas and his school, to the second; the masterpieces of Balzac and Thackeray, to the third, and the works of Tolstoi, Eliot, and Hawthorne, to the last.

We have no trouble in classifying Barbara's story along these lines. The talking monkey, and the bird who cooked, are frankly impossible. Her story is of the most primitive order. Minna's little tale is not so easy to pigeon-hole. Perhaps it is hardly a story at all. There is no consistent action, and only one character— evidently that of the writer. It is not in the least concerned with probability or consistency, but it brings to us an understanding of one mental state, or experience, of the little writer.

The first story deals with objective things in a logical way. It is a product of the intellect and of a knowledge of the things around the narrator, fancifully arranged. The second one deals with subjective conditions, and is largely drawn from the feelings. It has, also, a stronger æsthetic quality than the first. The first is produced in a sympathetic, kindly, intellectual atmosphere of inquiry. The second is produced in a narrower life, bound by a varied system of control that throws the child back more upon herself. If this analysis is correct, then the second child would profit greatly by a stronger objective setting to her life, accompanied by a steady and affectionate personal life. The one is a novel of character, with its resulting actions, and the other is a novel of incident, with its accompanying emotions. May we not sum it all up by saying that the first is strongly Occidental, and the second is Oriental?

In the last place, it is interesting to note that both stories are concerned with domestic affairs,—cooking, eating, and household responsibility. They are girls' stories.

These suggestions are not presented as scientific conclusions drawn from the stories. They are intended simply as questions and general aids to the student.

E. B.

BIBLIOGRAPHIES OF CHILD-STUDY.

EARL BARNES AND C. J. C. BENNETT.

Several attempts have been made to prepare bibliographies of works on child-study that would be helpful to students, and, in the following pages, we have tried to present and characterize briefly those printed in the English language. We shall be grateful for references to lists that have been overlooked.

Of course, it is unreasonable to ask that these bibliographies should be exhaustive, dealing as they do with a science that is just beginning to exist, and that is finding its first expression in scattered periodical articles, pamphlets, and leaflets, often published privately or by small and unknown societies. It should, however, include the important things in the field it purports to cover; it should not be encumbered with articles only nominally or not at all connected with its field; and each reference should certainly give the exact name of the article or book, the full and exact name of its author when known, the place and time of publication, and the size of the book or article, at least so far as to specify the number of pages that it contains. Any one who has tried to carry on investigations in this field of scattered literature will realize how valuable it would be if in a bibliography we could also have given the publisher and the price of the publication. Judged by these standards, the lists so far prepared are often weak and unworthy the earnest students who have sometimes published them. Oftentimes they seem to be simply fancy tailpieces to ornament the articles or books they accompany.

1. *Report of the Commissiouer of Education for the Year 1892-93*. Washington: Government Printing Office, 1895. *Bibliography of Child-Study*. Vol. i, pp. 385-391.

This is an alphabetical list of works, English and foreign, including magazine articles, leaflets, pamphlets, and bound volumes. The work shows many signs of having been hastily done, and by several hands. Some of the references meet the requirements specified above, except publisher and price; but most of them fail to give any idea as to whether the article is a leaflet of one page or a thick

volume, and the other elements are more or less lacking or faulty, as, for example, *Quain's Anatomy*, Vol. ii, London, 1888. Comparatively little material is brought into the list that has no claim to be there, though one questions such titles as: *Radestock. Habit and Its Importance in Education*. Boston, 1886. Still, the list is a valuable one. It is not classified, and there are no critical notes.

2. *Transaction of the Illinois Society for Child-Study*. Edited by C. C. Van Liew and Francis W. Parker. The Werner Company, Chicago. 1 vol. in 4 nos. 1895-96. *Literary References* Vol. i, No. 2, pp. 80-86, continued as *Bibliography* in No. 3, pp. 67-72, gives a classified list of about 450 titles. The list includes general works on psychology and other matter indirectly related to child-study. The references are brief—sometimes so brief as to have little or no value for the reader. Examples of such references are: *Our Eye and Our Industries*, Jeffries; *The Modern Eye*, Southard; *Is the Human Eye Changing Its Form under the Influence of Modern Education?* Loring. Such fragments are confusing and baffling to the student who wishes to look up the work already done in any line. Nevertheless, the list remains a valuable one. General reading references are appended to articles in No. 4, pp. 8 and 47, and in No. 1, pp. 72-73.

3. *Pedagogical Seminary* Edited by G. Stanley Hall, Worcester, Mass. Begun in 1891 \$4.00 a year. This journal contains reviews, notices, and references to most of the literature of child-study, English and foreign, that has so far appeared. The following articles have reading lists appended that are valuable: *The Hearing of Children*. By Oscar Chrisman. Vol. ii, pp. 439-441. Excellent. *Outlines of School Hygiene*. By Wm. H. Burnham. Vol. ii, pp. 68-71. Only indirectly connected with child-study, but valuable. *A Study on Motor Ability*. By John A. Hancock. Brief. *Education by Plays and Games*. By G. E. Johnson. Vol. iii, pp. 132-133. Forty-four well-selected titles. *Feeble-Minded Children*. By G. E. Johnson. Vol. iii, pp. 299-301. A valuable reading list. *A Preliminary Sketch of the History of Child-Study in America*. By Sara E. Wiltse. Vol. iii, p. 189. Contains a great deal of information concerning the development of the literature of child-study, with references.

4. *The Child and Childhood in Folk-Thought*. By Alexander Francis Chamberlain. New York. Macmillan & Co. 1896. *Biblio-*

graphy. Pp. 405-434. An extensive and carefully prepared classified bibliography.

5. *Bibliography of Education*. By Will S. Monroe. In International Education Series. Edited by Wm. T. Harris. Appleton & Co. New York and London. 1896. One section is devoted to books on child-study published in English. There are critical notes. One regrets that leading periodical articles could not have been added.

6. *Hints Toward a Select and Descriptive Bibliography of Education*. By G. Stanley Hall and John M. Mansfield. Boston. D. C. Heath & Co. 1886. Under *The Study and Observation of Children*, fifty references are given, with brief critical notes. Of course, much of the literature of this subject has appeared since 1886.

7. *The Psychology of Childhood*. By Frederick Tracy. Boston. D. C. Heath & Co. 1894. *Published Sources of Information*. Pp. 162-167. This list of books, which is fairly complete, is on children's mental life, and children's language. The second part is especially valuable.

8. *Studies of Childhood*. By James Sully. New York. Appleton & Co. 1896. Printed in the Popular Science Monthly, 1895-96. *Bibliography*. Pp. 515-517. A brief classified list, English and foreign. Neither exhaustive nor critical.

9. *Papers on Anthropometry*. Boston. American Statistical Association. 1894. *Provisional List of Works of Anthropometry*. This is very well arranged, and includes all the works in English published in the United States, on the methods and results of anthropometry.

10. *The Child-Study Monthly*. Edited by Wm. O. Krohn and Alfred Baylis. Chicago. Werner Co. Begun in 1895. \$1 a year. Gives scattered references and book reviews on this subject.

11. A few references are to be found in *Catalogue of Books in the Pedagogical Section of the University Library* (University of California). Berkeley. 1894. P. 30, and in *Catalogue of the Pedagogical Library*. Board of Education, Philadelphia. Philadelphia. 1887. Pp. 45-48. Also, in the supplement to same, p. 11.

12. Several of the brief general monographs published in this field have reading lists appended. The most valuable among these is *Suggestions on the Study of Children*. By Wm. L. Bryan, Indiana

University. 1894. Pp. 7-8. Republished with modifications in *Transactions in the Illinois Society for Child-Study*. Vol. i, No. 1. A valuable list. *Child-Study*. Issued April 15, 1895, by the Department of Public Instruction, Des Moines, Iowa. Pp. 13-16. About 100 references are given, generally well selected, but the references are often very imperfect. Southard. *The Modern Eye*, Jeffries. *Our Eyes and Our Industries*, and Loring. *Is the Human Eye Changing Its Form Under the Influence of Modern Education?* suggests the possible source of the same imperfect forms already condemned in the *Transactions of the Illinois Society for Child-Study*. *Hints of Child-Study*, by Charles H. Thurber, p. 12, published by Department of Public Instruction, State of New York, is a brief, priced list, helpful to general readers. *South Carolina Association for the Study of Children*. Bulletin No. 1. By Thos. P. Bailey, Jr. (University of California). 1895. pp. 13-16. Brief, broken references to a few books. *Child-Study* Colorado State Normal School. Normal Publishing Co., Greeley, Colo. 1894. A few fragmentary references.

DISCIPLINE AT HOME AND IN THE SCHOOL.

II. WHAT TO READ.

Dictionnaire de pédagogie et d'instruction primaire. Publie sous la direction de F. Buisson. Paris: Hachette et Cie. 1882.

Buisson's historical outline of punishment in connection with the training of children is the best historical and comparative study I know on the subject. The first part of the article takes up the history of discipline in the home and in the school through the historical period, and the second part makes a comparison of the existing regulations in the leading countries of Europe to-day.

Education · Intellectual, Moral, and Physical. By Herbert Spencer. New York: D. Appleton & Co. 1862.

For a treatment of punishment as an educational measure, we can hardly do better than to read that part of Herbert Spencer's treatise that deals with moral training. Mr. Spencer takes the

ground that punishment can be justified only in so far as it is educative, and that to be educative it must never be arbitrary, but must be a natural reaction growing out of the wrong that has been committed. The child must come to feel himself an organic part of the community and of the world in which he lives, and he must come to feel that no part of the social organism can violate the necessary laws governing the whole.

School Management. By Emerson E. White. New York: American Book Company. 1894.

All the treatises on school management and pedagogy give some attention to discipline. Mr. White's analysis of punishment, its ends and its characteristics, must commend itself to modern readers. His discussion of the limitations of Mr. Spencer's theory of punishment by natural consequence will prove interesting after reading Mr. Spencer.

Punishment as Seen by Children. By Earl Barnes. In the *Pedagogical Seminary*, vol. iii, p. 235. The same study is published with tables in *The Pacific Educational Journal*, November and December, 1895, and without the tables in *Journal of Proceedings and Addresses of the National Educational Association*, session of the year 1895, p. 914.

This is a quantitative study, based on papers written by some four thousand children. Its conclusions are very general.

Discipline in the Family and in the School, and Punishment for Weak Time-Sense. By Earl Barnes. In *Transactions of the Illinois Society for Child-Study*, vol. i, No. 3.

The first paper is a series of ten tests, with references to work already done; and the second is a quantitative study on papers written by 636 children. It represents the beginning of a study.

A Study of Children's Rights, As Seen By Themselves. By Margaret Schallenberger. In the *Pedagogical Seminary*, vol. iii, p. 87.

This is a very suggestive study on 3000 papers written by children, describing the punishment they would inflict on a little child under certain conditions.

EDUCATION AMONG THE AZTECS.

EARL AND MARY S. BARNES.

The modern method of study pushes everything back to its primitive beginnings, to its earliest rudimentary forms,—not, I take it, simply to know something of everything, but because an organism may be reduced to its simplest elements in this way, and so understood. The fundamental elements in political institutions emerge clearly when we see these institutions in their first primitive beginnings. So with education I believe very valuable results will emerge from a careful study of the primitive ideals of humanity and of the means, conscious and unconscious, which early peoples have used and still use to realize these ideals.

It should, however, in justice be said that this has not generally been the judgment of those who have written on the history of education. Thus, Mr. Compayré, in his history of education, says: "There is very little practical interest in studying these obscure beginnings of pedagogy. It is a matter of erudition and curiosity."

But, in matters of opinion, facts must decide; let us look, therefore, at a primitive code of education found among a primitive people, and see what there is in it for us. Let us take for our study the code found in the Aztec records and preserved for us by Spanish priests who entered Mexico in the days of its conquest. Clavigero, a Jesuit, who was born and lived in Mexico until the expulsion of his order in 1767, had full access to these records, and quotes at length from those preserved by the Franciscan fathers, Sahagun, Motolinia, and Olmes. Mexico was conquered in 1521; Motolinia came in 1524, Olmes in 1528, Sahagun in 1529; all spent their lives among the Aztecs, whose language they knew well. Motolinia wrote a Christian doctrine in Aztec, Olmes an Aztec grammar, and Sahagun a history of Mexico, obtained from the natives and written in Spanish and Aztec. The preparation Clavigero had for his work may be judged by the following extract from his preface:—

"Exclusive of the great expense occasioned by procuring from Cadiz, Madrid, and other cities of Europe the books which were necessary to my

¹ *The History of Pedagogy.* By Gabriel Compayré. Translated by W. H. Payne. Boston, D. C. Heath & Co. 1890. P. i. Mr. Payne, in a note to his translation of Compayré, points out a negative value of such study.

purpose, I have read and examined every publication which has appeared hitherto on the subject. . . . I have studied many historical paintings of the Mexicans; I have profited from their manuscripts, which I read formerly in Mexico. . . . I resided thirty-six years in that . . . kingdom; acquired the Mexican language, and for several years conversed with the Mexicans."¹

The spirit and aim of the records from which Clavigero quotes is to be seen in the following extracts from Sahagun, one of his chief authorities:—

"It is in accordance with the commands of my superior that I have written in the Mexican tongue all that seemed to me most useful for the teaching, practice, and establishment of Christianity among the natives of New Spain, and that could, at the same time, serve as the point of departure for those who are charged with their instruction. . . . I had the chief personages of the place brought to the Cacique, an old man of much importance, very clever, and of great experience in everything belonging to war, administration, government, and even the worship of idols. . . . I told them what I wished to do, and begged them to let me have some intelligent persons of experience with whom I could communicate, and who would be able to inform me of all that I might ask. He told me they would consider my request, and give an answer the next day. The next day . . . they recommended ten or a dozen old men to me. . . . There were among them four men who knew Latin, whom I had myself taught some years before . . . in the College of Santa Cruz (in Mexico). For two years I had frequent interviews with these people and scholars, following the order laid down in my notes. They drew in colors whatever made the subject of our conversation (for this was their former usage), and the scholars explained it in their own language, writing below the picture. I still have all these original manuscripts."²

The people, then, are the ancient Mexicans, in the days of the conquest, a people, perhaps, as advanced as the modern Siamese, in whose chief city Cortez wrote that he found more than 60,000 souls engaged in buying and selling "bricks, burnt and unburnt, timber, hewn and unhewn, . . . game of all sorts, medicines, mats, vegetables, fruits, honey, cotton, deer-skins, earthenware."³

Our witnesses, then, are these early missionaries, and what they tell us is this:—

"Besides this, almost all the inhabitants, particularly the nobles, took care to have their children brought up in the seminaries belonging to the

¹ *The History of Mexico.* By Francesco S. Clavigero. Translated by Chas. Cullen. London, 1787. Vol. I; preface.

² *Histoire générale des choses de la Nouvelle Espagne.* Par Fray Bernardino de Sahagun. Trad. par D. Jourdanet et R. Simon. Paris, 1880.

³ The dispatches of Hernando Cortez . . . translated by George Folsom. New York, 1843; letter ii.

temples, of which there were many in the cities of the Mexican Empire, for boys, youths, and young women. Those of the boys and young men were governed by priests, who were solely devoted to education; those for young women were under the direction of matrons, equally respectable for their age and for their manners. No communication between the youths of both sexes was permitted; on the contrary, any transgression of that nature was severely punished. There were distinct seminaries for the plebeians and the nobles. The young nobles were employed in offices which were rather internal, and more immediately about the sanctuary, as in sweeping the upper area of the temple, and in stirring up and attending to the fires of the stoves which were before the sanctuary. The others were employed in carrying the wood which was required for the stoves, and the stone and lime used in repairing of sacred edifices, and in other similar tasks; both were under the direction of superiors and masters, who instructed them in religion, history, painting, music, and other arts, agreeable to their rank and circumstances.

The girls swept the lower area of the temple; rose three times in the night to burn copal in the stoves, prepared the meats which were daily offered to the idols, and wove different kinds of cloth. They were taught every female duty.

.
'My son,' said the Mexican father, 'who art come into the light from the womb of thy mother, like the chicken from the egg, and, like it, art preparing to fly through the world, we know not how long heaven will grant to us the enjoyment of that precious gem which we possess in thee; but, however short the period, endeavour to live exactly, praying God continually to assist thee. He created thee; thou art His property. He is thy Father, and loves thee still more than I do; repose in Him thy thoughts, and day and night direct thy sighs to Him. Reverence and salute thy elders, and hold no one in contempt. To the poor and the distressed be not dumb, but rather use words of comfort. Honour all persons, particularly thy parents, to whom thou owest obedience, respect, service. Guard against imitating the example of those wicked sons who, like brutes that are deprived of reason, neither reverence their parents, listen to their instruction, nor submit to their correction; because, whoever follows their steps will have an unhappy end, will die in a desperate or sudden manner, or will be killed and devoured by wild beasts. . . .

'When any one discourses with thee, hear him attentively, and hold thyself in an easy attitude, neither playing with thy feet, nor putting thy mantle to thy mouth, nor spitting too often, nor looking about you here and there, nor rising up frequently if thou art sitting; for such actions are indications of levity and low breeding.

'When thou art at table do not eat voraciously, nor show thy displeasure if anything displeases thee. If any one comes unexpectedly to dinner with thee, share with him what thou hast; and when any person is entertained by thee, do not fix thy looks upon him.

'In walking, look where thou goest, that thou mayest not push against any one. If thou seest another coming thy way, go a little aside to give him room to pass. Never step before thy elders, unless it be necessary, or that they order thee to do so. When thou sittest at table with them, do not eat or drink before them, but attend to them in a becoming manner, that thou mayest merit their favour.

'When they give thee anything, accept it with tokens of gratitude; if the present is great, do not become vain or fond of it. If the gift is small, do not despise it, nor be provoked, nor occasion displeasure to them who favor thee. If thou become rich, do not grow insolent nor scorn the poor; for those very gods who deny riches to others in order to give them to thee, offended by thy pride, will take them from thee again to give to others.

'Support thyself by thy own labours; for then thy food will be sweeter. I, my son, have supported thee hitherto with my sweat, and have omitted no duty of a father; I have provided thee with everything necessary, without taking it from others. Do thou so likewise. . . .

'Stay no longer than is necessary in the market-place; for in such places there is the greatest danger of contracting vices.

'When thou art offered an employment, imagine that the proposal is made to try thee; then accept it not hastily, although thou knowest thyself more fit than others to exercise it; but excuse thyself until thou art obliged to accept it; thus thou wilt be more esteemed.

'Be not dissolute; because thou wilt thereby incense the gods, and they will cover thee with infamy. Restrain thyself my son, as thou art yet young, and wait until the girl whom the gods destine for thy wife arrive at a suitable age: leave that to their care, as they know how to order these things properly. When the time for thy marriage is come, dare not to make it without the consent of thy parents, otherwise, it will have an unhappy issue.

'Steal not, nor give thyself up to gaming; otherwise, thou wilt be a disgrace to thy parents, whom thou ought rather to honour for the education they have given to thee. If thou wilt be virtuous, thy example will put the wicked to shame. No more my son; enough have been said in discharge of the duties of a father. With these counsels I wish to fortify thy mind. Refuse them not, nor act in contradiction to them; for on them thy life and all thy happiness depend.'

'My daughter,' said the mother, 'born of my substance, brought forth with my pains, and nourished with my milk, I have endeavoured to bring thee up with the greatest possible care, and thy father has wrought and polished thee like an emerald, that thou mayest appear in the eyes of men a jewel of virtue. Strive always to be good; for otherwise who will have thee for a wife? Thou wilt be rejected by every one. Life is a thorny laborious path, and it is necessary to exert all our powers to obtain the goods which the gods are willing to yield to us; we must not therefore be lazy or negligent, but diligent in everything. Be orderly and take pains

to manage the economy of thy house. Give water to thy husband for his hands, and make bread for thy family. Wherever thou goest, go with modesty and composure, without hurrying thy steps, or laughing with those whom thou meetest, neither fixing thy looks upon them nor casting thy eyes thoughtlessly, first to one side and then to another, that thy reputation may not be sullied; but give a courteous answer to those who salute and put any question to thee.

‘Employ thyself diligently in spinning and weaving, in sewing and embroidering; for by these arts thou wilt gain esteem, and all the necessaries of food and clothing. Do not give thyself too much to sleep, nor seek the shade, but go in the open air and there repose thyself; for effeminacy brings along with it idleness and other vices.

‘In whatever thou doest encourage not evil thoughts; but attend solely to the service of the gods, and the giving comfort to thy parents. If thy father or thy mother calls thee, do not stay to be called twice; but go instantly to know their pleasure, that thou mayest not disoblige them by slowness. Return no insolent answers, nor show any want of compliance; but if thou canst not do what they command, make a modest excuse. If another is called and does not come quickly, come thou, hear what is ordered, and do it well. Never offer thyself to do that which thou canst not do. Deceive no person; for the gods see all thy actions. Live in peace with every body, and love every one sincerely and honestly, that thou mayest be beloved by them in return.

‘Be not greedy of the goods which thou hast. If thou seest any thing presented to another, give way to no mean suspicions; for the gods, to whom every good belongs, distribute everything as they please. If thou wouldst avoid the displeasure of others, let none meet with it from thee.

‘Guard against improper familiarities with men; nor yield to the guilty wishes of thy heart; or thou wilt be the reproach of thy family, and wilt pollute thy mind as mud does water. Keep not company with dissolute, lying, or idle women; otherwise they will infallibly infect thee by their example. Attend upon thy family, and do not go on slight occasions out of thy house, nor be seen wandering through the streets, or in the market-place; for in such places thou wilt meet thy ruin. Remember that vice, like a poisonous herb, brings death to those who taste it; and when it once harbours in the mind it is difficult to dispel it. If in passing through the streets thou meetest with a froward youth who appears agreeable to thee, give him no correspondence, but dissemble and pass on. If he says anything to thee, take no heed of him nor his words; and if he follows thee, turn not your face about to look at him, lest that might inflame his passion more. If thou behavest so, he will soon turn and let thee proceed in peace.

‘Enter not without some urgent motive into another’s house, that nothing may be either said or thought injurious to thy honour; but if thou enterest into the house of thy relations, salute them with respect and do not remain idle, but immediately take up a spindle to spin or do any other thing that occurs.

'When thou art married, respect thy husband, obey him, and diligently do what he commands thee. Avoid incurring his displeasure, nor shew thyself passionate or ill-natured; but receive him fondly to thy arms, even if he is poor and lives at thy expence. If thy husband occasions thee any disgust, let him not know thy displeasure when he commands thee to do anything; but dissemble it at that time, and afterwards tell him with great gentleness what vexed thee, that he may be won by thy mildness and offend thee no farther. Dishonour him not before others; for thou also wouldst be dishonoured. If any one comes to visit thy husband, accept the visit kindly, and shew all the civility thou canst. If thy husband is foolish, be thou discreet. If he fails in the management of wealth, admonish him of his failings; but if he is totally incapable of taking care of his estate, take that charge upon thyself, attend carefully to his possessions and never omit to pay the workmen punctually. Take care not to lose anything through negligence.

'Embrace, my daughter, the counsel which I give thee. I am already advanced in life, and have had sufficient dealings with the world. I am thy mother. I wish that thou mayest live well. Fix my precepts in thy heart and bowels, for then thou wilt live happy. If, by not listening to me, or by neglecting my instructions, any misfortunes befall thee, the fault will be thine and the evil also. Enough, my child. May the gods prosper thee.'"¹

Such is the material from which we must build our notions of Mexican education. First of all, we must carefully examine the nature of our evidence; ask ourselves, What was the purpose of these old Franciscans in telling us all this? What opportunities had they for knowing it? What was their point of view—their bias? What were their advantages, and what their limitations? After we have considered this question of witnesses, we may look at what they witness to. As we carefully review it, we shall see that it answers some very fundamental questions as to Mexican education, namely, Who were the instructors and what the school? What was the subject-matter taught? With what concerns of life did it deal? What was the method of instruction, and what its aim? What distinctions did it make among those taught? To what motives did it appeal? What relations did it recognize between the pupil, the external world, and his fellows, and what feelings did it seek to develop in these relations? Or, to put at once the all-embracing question, What ideals of manhood, womanhood, and childhood existed, and what relation was there between these ideals and the place, method, material, and *personnel* of the instruction?

¹ The History of Mexico. By Francesco S. Clavigero. Translated by Chas. Cullen London, 1787. Vol. I, pp. 335 *et seq.*

These are questions we should like to have answered—and who can answer them better than Sahagun, Motolinia, and Olmes, three men who saw and knew the Mexicans before they had received the imprint of Europe; men who knew their language, their feelings, their manners and customs; men who loved them, and saw the value of their life. To be sure, these men had as well the limitations of their age and faith; they had never studied comparative ethnology, nor history in any modern sense; they saw the ancient Mexicans without perspective or cosmopolitan knowledge; they perhaps had a desire to see them at their best as the future supports of the church in the New World. These limitations we must bear in mind; but the advantages of the eye-witness are, in some respects, incomparably beyond those of the scholar.

Although we must discount our record, then, by the remembrance of the narrow science and optimistic love with which the fathers wrote, we can yet see in their reports some essential facts of Mexican education. We see that in ancient Mexico the instructors were the priests, parents, and elders; the schools, the temples of the gods; the curriculum, careful courses in manners and morals. This curriculum dealt with the most primitive and intimate affairs of life, with eating, drinking, and marrying, with worship of the gods, and with intercourse with one's fellow-men, in the house, the street, the market, and the temple. We see that the method of instruction was didactic precept, and its aim the formation of an obedient, kind, submissive character. In forming this character, slight distinctions were made between classes, as we might expect in a country of masses. On the other hand, the distinctions of sex are emphasized so far as to provide different teachers, places, subjects of study for boys and girls respectively, with the aim of increasing to the utmost the retiring and industrious domesticity of girls. With both sexes, and with all classes, it appealed to fear of the gods and of society, and to the desire for love, admiration, and respect. This system recognized gods in heaven, rulers on earth, parents and husbands in the home—to all and each of whom the pupil owed fixed and imperative duties.

To sum it all up, in answer to that all-embracing question asked before,—The education of the ancient Mexicans recognized an ideal for men, women, and children alike, of kindness to the weak and poor, of courtesy and love to equals, but, above all, of

absolute, faithful obedience to all superiors. To realize these ideals, this education surrounded its pupil with priests, temples, and parents not too near. It told him what he must think and feel in each relation and circumstance of life, without asking him for any choice, and it impressed these duties upon his mind by a rigid, minute, and daily ceremonial, which worked his knowledge into his hands, his feet, his head, his heart. And so was evolved Montezuma and Montezuma's people.

Now, what has this study done for the student who has honestly worked out the questions set, and reached the conclusions laid down in the last paragraph? In the first place, he has been brought face to face with the problem of evidence, and has had to weigh the value of this particular record.

In the next place, he has had to look at the fundamental elements in human life and society in their simplest forms, and under conditions so new and so far removed from his own every-day life, that his prejudices and personal likes and dislikes have been comparatively inoperative.

In the third place, he has had to look at children in their relations to the vital forces of appetite, ambition, love, and worship, in their relations to the state, the church, the community, and the home. Further, this view has been presented to the student in a new setting, and it is exactly this new setting given by travel, wide experience, or history, that emancipates the mind from prejudice, and enables us to see the realities of life.

In the last place, it has shown us an extremely successful educational experiment which realized exactly what it tried to do; and it has shown us the instrumentalities and forces by which this was accomplished.

Studies in
Education

III.



STUDIES IN EDUCATION

EDITED BY

EARL BARNES,

Professor of Education in Leland Stanford Junior University.

SEPTEMBER, 1896.

	PAGE.
THE HISTORIC SENSE AMONG CHILDREN (Concluded)—Mary Sheldon Barnes	83
HOW CHILDREN JUDGE CHARACTER—Anna Köhler	94
REMINISCENT STUDY: III. HELEN: THE LIFE HISTORY OF CERTAIN IMAGINARY COMPANIONS—Clara Vostrovsky	98
HANNS GUCK-IN-DIE-LUFT (Illustrated)	102
A BAD (?) GIRL'S STORY	107
DISCIPLINE: III. HOW TO STUDY THE SUBJECT—Earl Barnes . . .	110
HISTORICAL IDEALS AND METHODS OF CHINESE EDUCATION—Earl and Mary S. Barnes	112
NOTES	119

VOL. I.
No. 3.

STANFORD UNIVERSITY.
1896.

\$1 a Year.
15 c. a Copy.

STUDIES IN EDUCATION.

These studies begin with July, 1896. They will be continued as a monthly publication for ten numbers, and will then stop. The last number will contain an index, and a full table of contents. The cost for the year is one dollar, or fifteen cents a number. Address all inquiries or subscriptions to

EARL BARNES,

Stanford University,
California.

Entered at the Post Office in Stanford University as Second-class Mail Matter.

THE HISTORIC SENSE AMONG CHILDREN.¹

[Concluded.]

MARY SHELDON BARNES.

The sense of evidence was examined by the two following tests:—

1. Write down something that happened before you were born, and that you know is true, and tell me how you know it is true.
2. How do you know that such a man as George Washington ever lived?

Even at the age of eight the children seem to show in hazy forms all possible variations of the sense of evidence. The following examples will illustrate:—

1. *Girl's evidence from family hearsay or tradition.*—My mother's grandfather got killed in the battle of waterlue. I know it is true because my mothers mother told her when she was a little girl and she told me.

2. *Girl's evidence from general hearsay.*—Because I have heard things about things that he did.

3. *Girl's evidence from a relic.*—I know that George Washington lived because I saw a picture of him.

4. *Girl's evidence from general reading.*—I know that George Washington lived because it was in the geography.

5. *Girl's evidence from logic.*—I know that my mother was in Berkeley before I was. The reason I know it is because she is older than me.

6. *Boy's evidence from logic.*—I know that such a man as George Washington lived because he fought bravely in many battels. And another reason he never told a lie.

7. *Boy's evidence from eye-witness.*—This school was built before I was born. Because I know a lady went to this school before I was born.

The following are typical answers from children above the age of eight:—

1. *Evidence from the Bible by a girl of nine.*—Before I was born Adam and Eve died, and thats why everybody else dies. The way I know it is true because it tells in the Bible.

2. *Evidence from an anniversary by a boy of ten.*—I know that George Washington lived because if he didnt they wouldnt celebrate his birthday.

¹ Reprinted and abridged from *Studies in Historical Method* by Mary Sheldon Barnes. D. C. Heath & Co., Boston: 1896.

3. *Evidence of boy of ten resting on family hearsay or tradition.*—My mother had to brothers fighting in North and South war, to get slaves free. One of them got wounded and died but the other got out all write but he only lived about one year after he came out of the war. I no that was true because my mother told me.

4. *Evidence from relics of boy of eleven.*—I know that such a man as George Washington lived because I saw his knives and forks and all such things that belonged to him at Smith's Sonian Instute in Washington D. C. and he is the farther of our country because he at war wone it.

5. *Evidence from history by a boy of eleven.*—I know that George Washington lived because it tells us in history about him and history tells the truth.

6. *Evidence from relics by boy of twelve.*—I know that Indians inhabited our land before I was borne because I have seen Indians skulls in wells and have found old arrows in the hills.

7. *Critical treatment of evidence by a boy of twelve.*—The Battle of Ticonderago, that happened before I was born, I don't know it is so only what people have told me. I didn't see it so I had to believe what people tell me.

8. *Evidence from relics of a girl of twelve.*—I know that the War of 1812 is true, because my grand-father fought in it, and before he died, he had badges remaining, which he wore at the time.

9. *Critical sense as to authorities expressed by a girl of thirteen.*—Before I was born, the Acadians were banished from Acadia because our best historians say they were. We know that Washington lived because our very best histories say that he did.

10. *Evidence from eye-witnesses and relics by a boy of thirteen.*—The war of the Rebellion was fought before I was born. I know this to be a fact, bacause I know several men who fought in it, and my father was a boy when it was fought, and I have an old piece of Confederate money.

The whole mass of material was classified under the rubrics, and gave the results seen in Charts 13, 14, 15.

The results of this study, then, appear to be the following:—

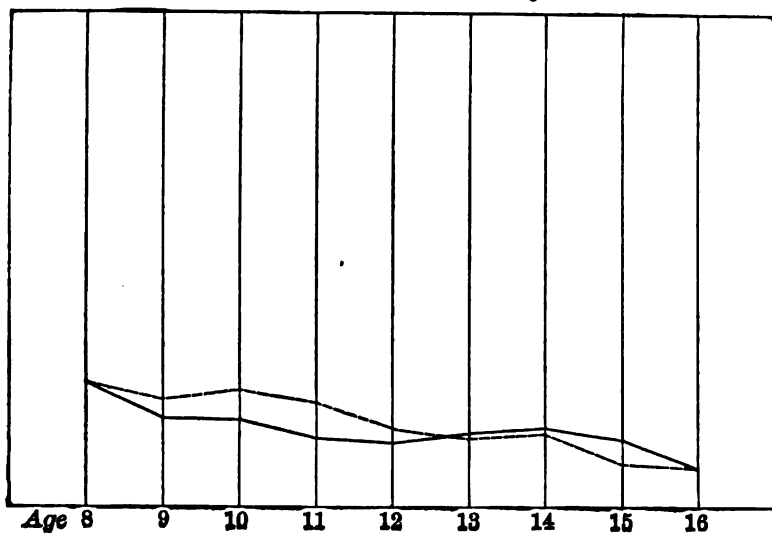
1. That even at the age of eight the dependence on hearsay is not strikingly greater than the dependence on eye-witnesses and relics; and that this dependence constantly declines, being from the age of nine onward distinctly less than the dependence on historic sources.

2. That the dependence on an expert authority, as shown in distinguishing histories from other books, and in distinguishing the very best from inferior histories, grows steadily and rapidly from the time of its first appearance.

3. That the dependence on original sources, such as eye-witnesses, relics, documents, decidedly present at the earliest age examined, constantly develops until, at the age of thirteen, it takes and keeps the lead over all other sorts of evidence.

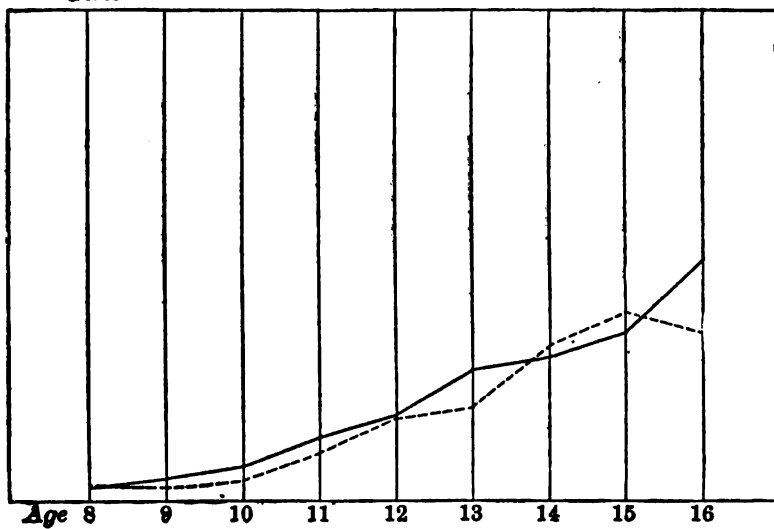
— Boys
— Girls

Chart 13. Evidence from Hearsay



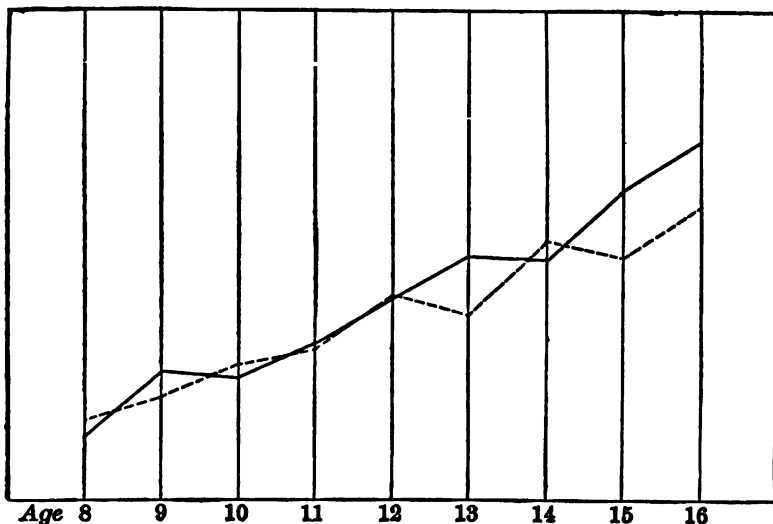
— Boys
— Girls

Chart 14. Evidence from Histories



— Boys
 - - Girls

Chart 15. Evidence from Sources



4. That there is no marked sex-difference in regard to the sense of evidence.

The sense of evidence was still more exactly examined by the following test. The children were given the two following accounts of the fall of Fort Sumter:—

(a) The defence of Fort Sumter by Major Anderson was brave and stubborn. The garrison was under fire for thirty-four hours, the quarters being entirely burned, and the powder-magazine surrounded with a ring of fire; starvation, too, was staring them in the face. Anderson therefore surrendered, saluting his flag, as he marched out, with guns and drums and flying colors.

(b) Despatch from Major Anderson to Washington:—

SIR: Having defended Fort Sumter for thirty-four hours, until the quarters were entirely burned, the main gates destroyed, the powder magazine surrounded by flames, and no provisions but pork remaining, I accepted terms of evacuation offered by General Beauregard, and marched out of the fort with colors flying and drums beating, saluting my flag with fifty guns.

ROBERT ANDERSON.

After writing down these two accounts, the children were asked to write further in answer to the questions: Which of these two accounts is the better, and why? Which of these two accounts would you keep if you could only keep one, and why? It was

found that children below the age of nine could do nothing with this test. The following are fair samples of answers received above that age:—

1. *From boy of ten.*—I think it would be best to keep Anderson's because he knew more about it and because he was in the war and was the Captain.

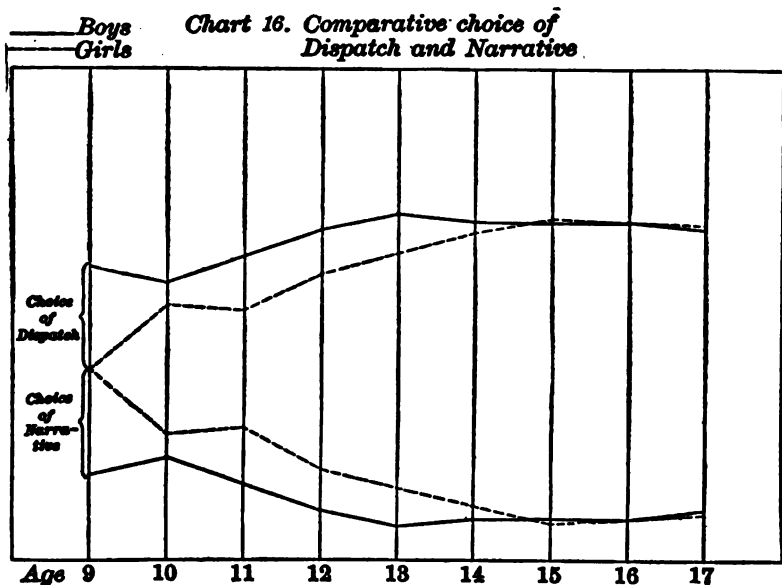
2. *From girls of eleven.*—(a) I think the first account is the best because the men are the bravest. (b) I think that Robert Anseron's aought to be kept. Because Anderson was the General and he would know more about it so I think Anderson aought to be kept. (c) If these were the only two accounts in the world, about this matter, I think I would like to keep "B," because Major Anderson wrote it. I think it would give me pleasure, to think that I own'd something, which one of the brave men who fought in battle, wrote.

3. *Critical answer of girl of twelve.*—I think the second one is the best, because we don't know who wrote the first, and we know that Major Anderson, who was in the battle, wrote the second.

The following answers show a discriminating critical sense between an original document and a narrative drawn from it:—

1. *From a boy of fourteen.*—I would keep Major Anderson's dispatch telling about it because it is the base upon which the other is obtained from.

2. *From a girl of fifteen.*—The dispatch is also the very words of the general himself while the other might contain incorrect statements, as it is simply a discription written by some one no one knows whom.

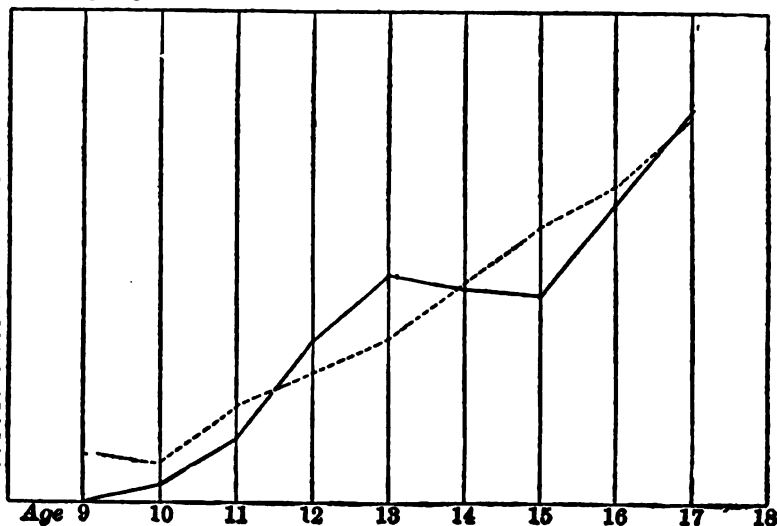


The results of this study are clearer and more satisfactory than of any other, probably because the test is so simple that its results are not clouded by obscuring sidelights on a variety of other subjects; they appear graphically in Charts 16 and 18, and may be summed up as follows:—

1. We find very slight traces of sex-difference.
2. From the age of nine onward, original material is preferred to secondary.
3. This choice rests on three bases:—
 - (a) The love for a relic, a visible connection with the past.
 - (b) The desire for a genuine piece of evidence.
 - (c) The critical sense of difference between an original and a derived account.

The first two bases shade into each other imperceptibly; the third is rare, but present in clear and definite form from the age of thirteen upwards, being slightly superior in boys. Its rapid increase upward indicates that it does not reach its limit within the ages examined. This curve confirms those given in connection with critical inference, as well as those resulting from the general test on evidence.

— Boys *Chart 18, Dispatch chosen because True, signed etc.*
 - - - Girls



To sum up,—What do these studies on children and primitive peoples¹ indicate as to the development and treatment of the historic sense, granting that this sense was correctly analyzed in the beginning as consisting in the notions of time, of cause and effect, of the social unit, and of a truthful record? The way is long, the goal is but a point; the study is tedious, the conclusion short.

1. As to the order in which these notions appear, we see that among savages they appear all together in the rudimentary form of the myths of origin, which, unplaced in space, vaguely placed in time, attempt to give some true account of the beginnings of man and of the world. Such are the tales of Prometheus, of the Under-World of the Zuni, the Midgard and Yggdrasil stories of the North. As the notions appear together, so they progress, none of them missing, now this one, now that one leading; but within the forms of primitive history, we find small indication of a critical sense. History, then, appears early as a consciously separate field of human knowledge.

Among children we find the same fact. From the age of seven onward we find them inquiring after time, cause and effect, the social unit, and the truthful record,—that is, all the elements of history lie within the field of the child's curiosity; and it is interesting to note how early they inquire after origin: Who made us? Where did we come from?

The plain conclusion as to method here is that history is a suitable subject for children from the age of seven at least.

2. As to the sense of time, we see that this sense with savages is based on the power to count, and the power to record that count concretely, either with the fingers, the notched stick, or the knotted cord, and that it develops along with the development of the inventions for keeping count; in other words, that this sense requires much objective assistance. With children we have seen that sense seems slight, and that time is badly understood until the age of twelve or thirteen. The conclusion as to method is that the child should be assisted, as the savage was, by some concrete symbol or invention, by which he can keep his counts in sight, and reckon time visibly. I think, then, that in teaching history one should always have by him a chart or net of centuries, as one has a map of the world, so that the children may place their heroes in time, as

¹ See *Studies in Education*, July, p. 29.

they do in space. In the Stanford experimental school, when such a chart for time was made by each child, one little girl of nine made the following enthusiastic statement to her mother about it:—

“I shall always try to keep my history book, because it has something very precious in it. It has a long line running through two or three pages all marked off in pieces, and each piece is a hundred years, and it tells you just where people are. The first part has Christ and Paul in it, and Rollo is in one part and a lot of other people.”

3. As to the notion of cause and effect, or, to put it differently, the power to infer, we see that both with savages and children it is present from the beginning, but that it is unconscious with primitive peoples, and that with children the power does not become at all critical before the age of twelve or thirteen, and that it seems then to receive a positive impulse, becoming stronger as well as more exact. The conclusion as to method is clear, that children should not be especially trained or urged in inference until the ages of twelve or thirteen, and that then we may reasonably encourage them to draw independent and correct conclusions from given premises.

4. As to the sense of the social unit, we have seen that with primitive peoples this sense concentrates itself about ancestors, heroes, kings, developing into a sense of wider personality as their history, that is, their experience, widens. The interest of children according to the indications, follows the same order; but, since education partially takes the place of experience, we cannot yet say positively at what age we may develop the larger interest; at present we may say not before the ages of eleven or twelve. The application to method is that history should first interest itself with the biographies of heroic and striking characters who are connected with the previous knowledge or life of the child; they may be connected with the myths he already knows, like those of the Greek or Norse heroes; they may be connected with the country, as Charlemagne with France, Columbus with America; they should always be connected with that life of action which belongs to children and primitive people alike. These biographies should be of men who fight and hunt and build, rather than of men who write or think or legislate. John Smith is nearer to the child than William Bradford. This biographic life may be drawn from many different sources, and thus lay the foundation for that comparative and critical history which is the next stage of vision. With children, we may allow instruction to take the place of war and trade in widening their narrow world.

5. The sense of a truthful record seems to be quite positive with savages, although it does not occur to them to substantiate that truth by any searching criticism of evidence. Children, too, are very anxious to know whether a record or a story is true or not, although they are largely contented with being told that it is true by a person in whom they have faith, not showing a tendency to inquire critically into the matter until the ages of twelve or thirteen. The efforts of savages, however, to preserve the *original* record or relic by every means in their power, as well as the interest shown by children in an original record or relic, indicates strongly the possibility, if not the desirability, of connecting history from the beginning with original records, scenes, and objects, thus giving the children that material tie with the past which they desire as much as savages, and, in fact, as much as any one who has the least historic sense.

6. As to the forms of history, we have seen that critical history develops last in the history of the race, being preceded by beautiful history, moral history, and mnemonic history, all these forms running along contemporaneously. With children we see that history finds natural expression in stories, pictures, dramatic plays and poems, with or without a moral. From both these sets of facts I conclude that we should seek our history for children in Plutarch, Homer, and Shakespeare, before seeking it in edited documents with notes and criticisms of the modern school of history. Nor must we forget that primitive history shows a large mnemonic element, appearing in lists and genealogies. This arises from the fact that the memory requires an artificial cog, and these lists and genealogies supply the place of the earlier knotted cord. Here, again, we are supported in the opinion that the teacher of history to children should not neglect this indication, but should always have at hand some form of chart or list or century calendar which can constantly be used, as a map would be, for reference in matters of time, until it becomes, as maps or words themselves become, a part of our symbolic mental equipment. The wide employment of æsthetic and didactic forms of history indicates that they should form a large element in the early presentation of our subject. On the æsthetic side, Homer, Ossian, the Nibelungenlied, on the didactic side, Plutarch and the Bible, give us plenty of appropriate material. The scientific forms must wait on the development of material, and also on the development of the critical sense; that is, until the ages of twelve and above.

7. As to the content of history, the instant widening of interest and curiosity among primitive peoples when brought into contact with new objects and people, and the instant wakening of interest in children at the sight of a strange relic or picture, indicate that we may widen the field of history as fast as new experience or knowledge can widen it.

8. As to the sex-difference revealed in the directions of curiosity and inference, they are not pronounced enough to warrant a separation of boys and girls; in fact, it is probable that no artificial method of stimulating these powers will equal the natural rivalries of the schoolroom and the sexes.

The points as to succession of methods revealed by this inductive investigation are as follows:—

Introduce the subject of history into the curriculum as early as the age of seven or eight, or soon after children can count and read, making no difference between boys and girls. Up to the age of twelve or thirteen, history should be presented in a series of striking biographies and events, appearing as far as possible in contemporary ballads and chronicles, and illustrated by maps, chronologic charts, and as richly as possible by pictures of contemporary objects, buildings, and people. This series should appear in chronologic order, the biographies themselves forming the basis of the chronology. These biographies should be chosen from the field of action and interest allied to children's lives; that is, they should be chosen from the personal, military, and cultural aspects of history, and scarcely at all from the political or intellectual life. Great pains should be taken with the first presentation, since it plays so important a part in the historic memory. The whole field of general history should be covered in this way, and should be taken from such sources as the Bible, Homer, Plutarch, the Norse Sagas, tales of Indian warfare and pioneer life, voyages of great discoverers. These should be given in their original forms, only modified by such omissions as are demanded by youth and inexperience. These primitive texts should be illustrated as richly as possible by portraits, pictures of relics and monuments, maps, charts, ballads, stories.

At the age of fourteen or fifteen another sort of work should appear. Original sources should still be used, selected with the utmost critical care, so as to furnish pure material; these sources should illustrate, however, not the picture of human society moving

before us in a long panorama, but should give us the opportunity to study the organization, thought, feeling, of a time as seen in its concrete embodiments, its documents, monuments, men, and books. Now come the statesmen, thinkers, poets, as successors to the explorers and fighters of the earlier period; and they speak more seriously in documents and literature: so once more the mind reviews the great field, but applies new powers to new material. Sources, of course, should still be used, but used with reflection; and the children should be encouraged not only to understand and remember them, but to interpret and criticise them. They should learn to read with increasing accuracy and fulness between the lines for the life and thought of the people they study, and for the standpoint of the narrator. They may also be led more and more to answer the questions: How do we know that this is true? What part is true, and what not? and how do you distinguish between these true and untrue parts?

Again, the fact that scientific history is based in the actual course of development upon comparative history as presented by trade and war, shows us that we must prepare the way for scientific history in education by separate special studies; while the study of children shows that we must not begin the work of comparison before the age of twelve or thirteen, and probably not until fifteen or sixteen, since the constantly rising curve of the critical power indicates that it is still in rapid evolution at the latter age.

In college still more advanced work follows,—the collection, comparison, criticism of sources themselves, as well as their most critical interpretation. It is the age of monographic special study. This is the work that feeds the former sorts, giving purer, clearer sources for our service, and more and more sympathetic interpretations. The former sorts of work, in turn, give a background and an atmosphere for the latter; add warmth, color, distance, light and shade. How many a child longs to know something true and old; how many a college student finds his thesis a disconnected fragment, torn he cannot clearly see from where, and related he scarcely knows to what.

HOW CHILDREN JUDGE CHARACTER.¹

ANNA KÖHLER.

A desire to learn the characters that children admire, and the effect of different passages upon their sympathies, suggested the reading aloud of Miss Alcott's *Little Men* to a class of fifty-two boys and girls varying in age from nine to fifteen.

Miss Alcott's charm as a writer for children lies in the fact that she writes not for but to them. She tells of the every-day life of normal children, whose faults and virtues are equally displayed. From the first, the children manifested intense interest in the story. They felt that they were the "Little Men" and "Little Women," and that they would have their schoolroom as much like Plumfield as it could possibly be made. In fact, during this reading all the discipline of the school was regulated by "Little Men." The children were allowed to talk freely about each chapter, and often when the reading was stopped at a very exciting part, they were asked to tell what they thought would happen next, or which boy they thought would win. Then came many interesting answers, revealing the children's natures, through their choice of characters.

The interest of the girls was more sustained through the whole book than that of the boys; when chapters devoted entirely to Daisy and Nan were being read, the latter grew less interested, waiting restlessly for the boys of the story to reappear. Nan they liked when she was the companion of the boys, but not when she played "lady" with Daisy.

Many of the boys did not like the pathos of the story, while the girls listened as attentively to the pathetic parts as they did to the gayer ones, many saying they were the best parts of the book. Several boys asked to "skip that part" when we were reading about Dan's misfortunes or John Brook's death. Boys making this request were of decidedly different characters.

The effect left upon the school at the end of a sad chapter was not a quieting one, as might have been expected. The children seemed restless and the whole atmosphere was heavy; but when we closed at a funny part filled with children's tricks, brightness was

¹ Reprinted from the *Pacific Educational Journal*, April, 1895, with changes.

seen radiating from each happy face; they settled down to work, and busy noise took the place of idle restlessness.

A full discussion of characters was allowed but once before the book was finished, and that was in connection with Dan's fight and for the sake of its bearing upon a fight that took place on the school ground the day before, in which one of the boys in our room was involved. This boy was an Irish lad of a bullying nature, stubborn, lazy, but very tender-hearted. Dan's fight, it will be remembered, occurs near the beginning of the story, long before his better traits were developed and before the children were in sympathy with him. They were asked which boy they liked best, no reference being made to the fight of the day before. Demi, Tom, Nat, and Emil, were the different answers. The boy in question was asked, and replied, without a moment's hesitation, "Dan." Being encouraged to tell why he liked Dan, he said: "Because he was n't one of those boys who was afraid to fight, and when he did a thing he stuck to it." The similarity between him and Dan was so marked, that it showed plainly, in this case, that his sympathy was with a boy like himself.

When the book was finished, each child wrote about his favorite boy or girl in the story. Many were undecided, both among the girls and boys, as to which they liked best, and the most marked cases of indecision were the children that showed no very marked characteristics of their own.

Dan was the hero among his own sex, several being carried away by admiration of his bravery, although often no special likeness could be traced between him and the boys who chose him. Among these were three boys who gave as reasons for their choice, — "He was manly and brave," "he didn't do sneaking things," "he could do a thing for a fellow without everyone knowing about it." The youngest boy in the room, of gentle manners and most lovable nature, liked Dan best because "he was always kind to the other boys, and he helps 'Mrs. Jo' trim up the house, and goes out in the woods and fields and gets all kinds of ferns and leaves and flowers. I guess the ferns and leaves and flowers made him so good," he adds.

Nat it will be remembered did not always tell the truth. He was liked best by a little boy who had a similar weakness, and who gave for his reason: "He tried to be good and loved music, and if he did tell lies he was awful sorry for it."

All the mischievous boys liked either Tommy or Stuffy because they were full of tricks, and it is interesting to note which trick made the most impression. One boy who spent most of his time in killing flies or making pictures on his finger nails, wrote: "I like Stuffy the best because he is always eating and is full of tricks." He then related the story of the melons, closing with: "Stuffy was smart to put those melons before the three boys, for *they* were pigs then."

A poor boy living with his widowed mother, and a great favorite with all the boys, liked Demi best, and gave the following reasons: "I like Demi best, because after his father died, he worked to help his mother make a living. He was good to everybody and always tried to do what was right."

Jack was the boy who stole Tommy's money, and one boy liked him best although nothing shows that their characters were in any way similar. He says, "I like Jack best, the boy who took Tommy's money. One day he got up and put the money back, and wrote a note, saying Dan could have all his things, and he went away."

An unusually bright, active boy liked Tommy best because "he was good-natured and business-like."

One who chose Nat and who was much like him, writes: "I like Nat, because he brought Dan, who was a rough and rude boy, to the school, and afterwards Dan paid him, not by money, but by courtesies. Nat helped others by being good; and that's just as good as gold or silver."

This will give some idea of the characters chosen by the boys. In nearly all cases the choice was by similarity.

Nan and Daisy were two such opposite characters that the girls had little trouble in deciding which was their favorite. The quiet, lady-like girls, who preferred the quieter games, chose Daisy; many papers were like the following: "Daisy was never naughty; she liked to play with dolls, but she does not like to play with boys, because she thinks they are too rough, and would knock her down and hurt her." A very studious girl, who stands at the head of her class, writes: "Daisy is a very smart girl, and she always learns her lessons, and Aunt Jo feels very proud of her." One likes Daisy best because "she is so kind to Nat and Demi, and because she has so many pretty flowers which she takes good care of and which she enjoys very much." A number like her simply because "she is lady-like and does not like boy-plays and isn't rough."

Nan was on the whole the favorite, and like Dan with the boys, carried many away by her independent spirit. In no case did a boisterous, fun-loving girl choose Daisy as her favorite, while there were five, the very counterparts of Daisy, who chose Nan. Nan is liked, because "she is brave," "she is full of fun, and likes to jump and run and play," and "when anyone gets hurt she likes to tend to them." One girl who loves out-door sports, rides to school on horseback, plays marbles, etc., writes as a conclusion: "I guess I like mischievous people, because I am so bad myself. I never am happy unless I am into some scrape. I think that when we are older it is time to settle down, and then I don't see any need of being so prim and stiff."

Little Men did not afford so good a field of characters for the girls as it did for the boys, as only the two types of girls were drawn. Consequently the results are far from satisfactory as a study of individual traits.

A few smaller children were studied as to the kinds of stories they liked best. Stories were read aloud to boys and girls together. The boys rebelled against "girl-stories with dolls." The quieter dispositions of both were interested in all kinds of stories, but the livelier, more mischievous children, delighted especially in stories of birds and animals. One boy of four years was told a story about a little boy, and after the story was finished, he seemed waiting for something more. At last he asked, "And was that little boy just like me?" He wanted the personal application.

Judging from this slight study of characters in *Little Men*, it seems safe to say that in the majority of cases a child's sympathy is with a child like himself. Boys do not like the parts that appeal too strongly to their feelings, and they are not in sympathy with the parts that treat of girls. The girls, on the contrary, rather like the pathetic parts, and do not dislike the chapters treating of boys.

The question now is, can this kind of study aid us in knowing better the characters of the children so that we can help them? If we know of a power that is weak, we can develop it by exercise and strengthen it by constant training. When we understand the child sufficiently well, can we not by selecting appropriate characters in books, strengthen or modify the various qualities of his own character?

STUDY IN REMINISCENCE.

III. HELEN: THE LIFE HISTORY OF CERTAIN IMAGINARY COMPANIONS.

CLARA VOSTROVSKY.

Helen is the name given by Miss X. to a long and very interesting study of her own imaginary companions. This study, of which the following is merely a review, comprises a bulky manuscript of about a hundred pages of foolscap, and contains the true history of how certain of these shadow people played a prominent part in this woman's life from childhood to maturity. We are growing familiar now with cases of such companionship carried on for brief periods, or even for a year or two, but anything so remarkable as one set of these dream children continuing in, and influencing a life for over twenty years, is certainly rare. An illustration of the continued devotion in this case is found in the fact that Miss X., a sensible, cultured woman, tells us that only a couple of years ago, she recognized and enjoyed their presence during an entire trip to Alaska.

Miss X., the creator of these dream children, is a woman over thirty, of a serene and lovable disposition, with nothing of the nervous temperament with which one would associate anything extreme. Her ability and desire to do careful, conscientious work is seen in every page of the manuscript. A teacher herself, she has written this history only through a scientific desire to have others benefit by whatever was strange or unusual in her own experience. She tells us, in fact, that the thought of writing it was exceedingly distasteful to her. Her strong will alone enabled her to carry through the undertaking.

The study is written in the form of a faithfully annotated story, for a romance unconsciously wove itself about the unseen friends. The romance, however, never appeared to Miss X. consecutively, but in scraps, now one scene, now another, gaining ascendancy, particular scenes occasionally securing such hold as to appear dozens of times in succession, to the exclusion of all others.

As a story, *Helen* does not differ in any marked degree from stories of real child-life. The interest centers around the heroine, Helen, who as an orphan is welcomed into the family of her uncle, a Dr. Nelson. This family consists of the Doctor, a sympathetic, conscientious man, the Doctor's wife, a frivolous, childish woman, their sweet daughter Nell, who is inclined to be a little jealous of the new comer, Nell's sensible cousin, Philip, and far from least, Docie, the valuable servant, the friend of the Doctor and his daughter, but the sworn enemy of her foolish mistress. The main portion of the story deals with the children themselves, their plays, adventures and controversies, the older persons merely serving as a kind of background for the children. A prominent characteristic of the story is the fact that it deals almost entirely with action.

In the writer's efforts to produce the story as it originally came to her (the main portion having been created before her twelfth year), we are brought face to face with difficulties every one must meet who attempts to do reminiscent work of any kind. There are portions which plainly show how, despite herself, changes have crept in, which were probably introduced as she grew older. Thus the relations of the two women, Docie and Mrs. Nelson, are full of inconsistencies; in one scene they appear as real women naturally jealous of one another, and in the next perhaps, as mere quarreling, unreasoning children. Then, too, it seems very probable at least, that some of the incidents mentioned did not happen to the companions at first, but to the author herself as a child, being unconsciously transferred to the former later. She acknowledges, for instance, that some of their superstitions belonged to her own childhood. Discounts such as these must be made in all studies from memory.

A striking characteristic of the romance is the vividness with which all is remembered, the visual pictures standing out clearly and distinctly, with the perfection of detail commonly supposed to be found only in Dutch paintings. Take this as a typical example of a picture drawn with no corresponding reality. "As she (Helen) goes through the barnyard, I see straw, weather-beaten boards, a muddy place where the water has overflowed from a drinking-trough hewn from a log, a dusty place beyond it, and a little hollow worn where one has to stand to open the big gate. I even wonder why both sides of the big trough are not hewn alike, and why the green moss is allowed to grow there."

But to turn more particularly to the companions themselves, we

find that their origin, as is so apt to be the case, is not remembered. Their coming, however, whenever she was "quiet, unoccupied, or alone" is significant. The fact, too, that the writer's own childhood was a happy one, does not interfere with the inference that the fancies arose from that craving for sympathetic understanding which often the slightest disappointment brings to the child. Thus we find one of the earliest scenes to be where Helen is seeking comfort after a mishap, with her cat, and another favorite scene to be that of Helen's arrival, when she feels shy and lonely and but half-welcome among new friends. This is still further borne out by the fact that the strong, helpful Docie, whose mere presence is comforting, is especially loved by her.

Certainly the scenes in which Helen, the main character, plays any considerable part, show her either in trouble or in a half-melancholy frame of mind. But other scenes must be otherwise explained. Some seem to have appeared through a desire to re-experience pleasures similar to those actually enjoyed. Such an explanation might reasonably be offered for a common and delightful view of the children building a dam.

The study in more ways than one throws light on children's imaginative activity. Thus of the plays in which the imaginary friends indulged, the author says: "I am sure that my own plays and pastimes both winter and summer, were more interesting than some that come in the story, and many were more novel." One would naturally expect that when a child's imagination was once thoroughly aroused, it would suggest all sorts of new and novel things. But it is to be noted that the story confines itself pretty closely to the commonplace but more important facts of daily life. It is true, however, that things are occasionally imagined which only a child's imagination could produce. We have a scene for instance between Docie and Mrs. Nelson, in which the servant tries to cut off her mistress's curls to cure her of going into fainting fits. "When he (the Doctor) threw the door open, there knelt his wife at Docie's feet, begging to be spared, in most abject words, and Docie, armed with a long pair of shears, held the lady's long curls in the other hand, giving them many a sharp jerk as she tried to get a clip at them. . . . A few sharp words from the Doctor caused Docie to release her mistress, but she did so reluctantly, and even when she had done so, stepped toward her again as if to complete her work."

The absurdity and impossibility of such a scene does not, through lack of experience and knowledge, occur to the child. It is interesting, too, to note that having once imagined a scene which later experience proved impossible (as a river flowing into mountains), this knowledge did not tend to modify it, the charm and reality seeming to lie with the picture as first conceived.

I have said nothing yet of the change that occurs in the last part of the work. It is after a break in the story and belongs later in life. The first part (which includes by far the greater portion of the study), is thoroughly sane in tone. The last portion, on the other hand, is the only evidence we have of the imaginings having been at all unhealthy. Some new characters are here introduced, none of them pleasant nor agreeable, and almost all the characters of the first part are described as unhappy or discontented. A gloom seems to hang over all. An evil man, with a savage dog, likewise disturbs the harmony. What does this change mean? Can it be the natural outcome of brooding or dreaming too long over one class of things? It may point at least to the great evil apt to come from excessive imaginary companionship.

If we compare this careful study with our more general ones, we find many similarities. As in those studies,* human beings are not the only companions, a hen, two birds, and several dogs playing as active part here as in real life. We have already spoken of children being the main characters. Then, too, as in our other studies, all have definite names and appear in definite backgrounds. On the author's part we find, likewise, the same objection to bringing these unseen friends—so real to her—to the broad light of day. In two respects the studies disagree; the writer of *Helen* is not of the nervous temperament most of the other cases we know are described as being. Then, too, none of the characters stand in any degree for her. On that point she is very definite, her interest in them having always been that of an outsider.

It is impossible in a paper of this length to give any clear conception of the wonderful glimpses into child life with which the work is filled. Any one dealing with the manuscript, must feel it is a mine which will one day repay being worked.

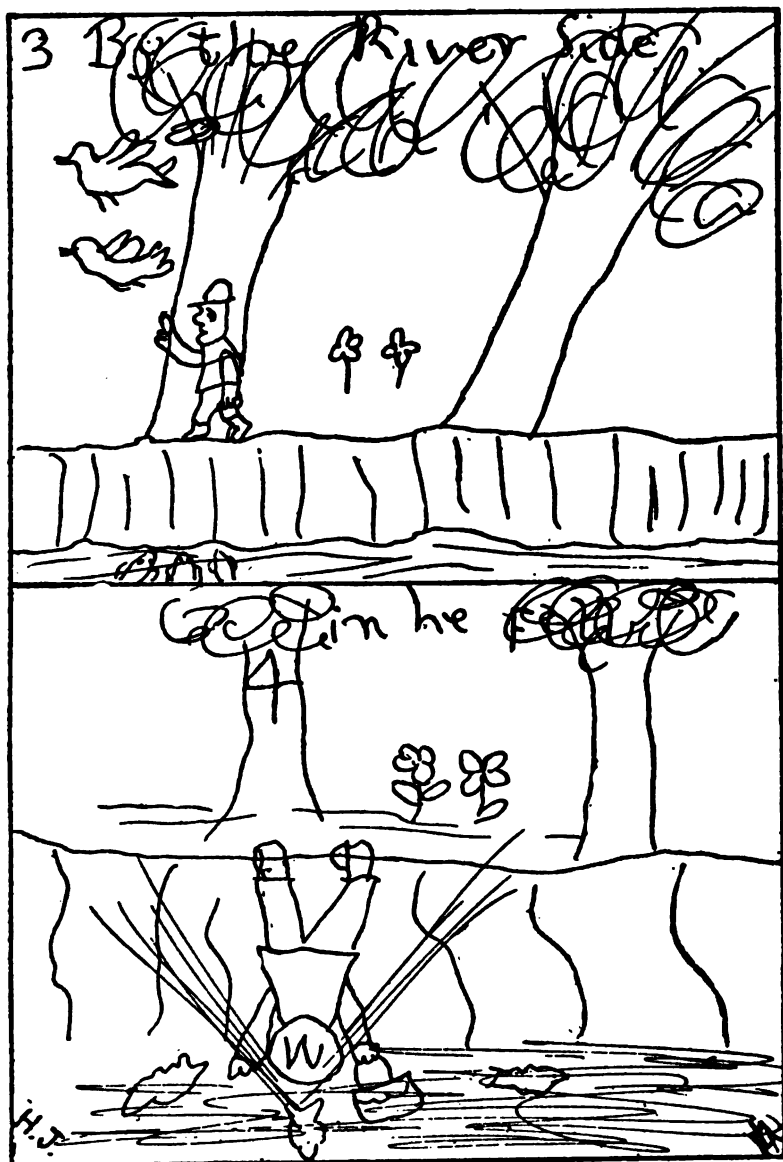
* *Children's Imaginary Companions.* By Earl Barnes. In the *Sequoia*. Stanford University, March, 1892.

A Study of Imaginary Companions. By Clara Vostrovsky. Education, Boston, Mass. March, 1893.

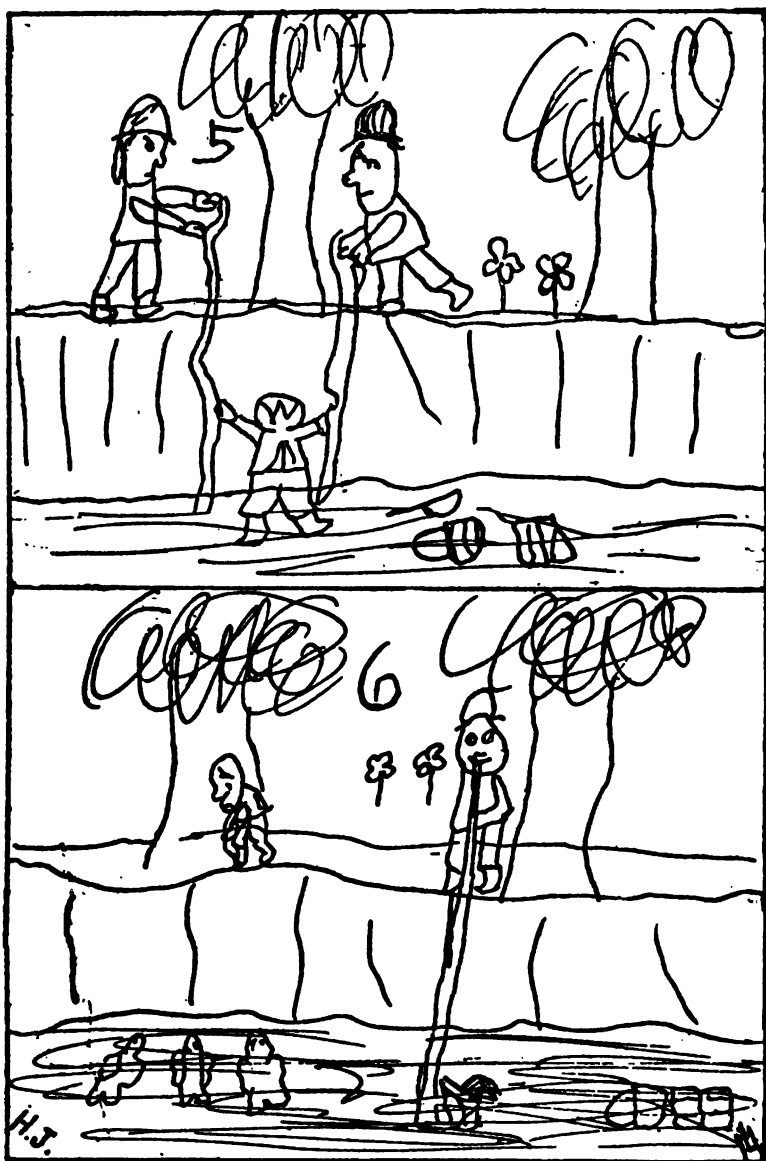
HANNS GUCK-IN-DIE-LUFT.



HANNS GUCK-IN-DIE-LUFT.



HANNS GUCK-IN-DIE-LUFT.



III.

COMMENTARY ON THE PICTURES.

In the last number of the *Studies* we had a picture illustrating the cataloguing tendency of young children. The drawings represented the elements appearing in the story of Bluebeard, rather regardless of sequence. In these pictures we have a more advanced stage where successive scenes are portrayed. It is not yet art, but it is advanced picture-writing. These pictures were drawn by a boy of eight, whose only instruction in drawing came from a sister two or three years older, whose art was entirely self-developed. The pictures were drawn from the following story:—

STORY OF JOHNNY-LOOK-IN-THE-AIR.*

As he trudged along to school,
It was always Johnny's rule
To be looking at the sky
And the clouds that floated by;
But just what before him lay,
In his way,
Johnny never thought about;
So that everyone cried out:—
"Look at little Johnny there,
Little Johnny-Look-in-the-Air."

Running just in Johnny's way,
Came a little dog one day;
Johnny's eyes were still astray
Up on high, in the sky;
And he never heard them cry:—
"Johnny, mind, the dog is nigh!"
What happens now? . . .
Down they fell with such a thump,
Dog and Johnny in a lump!
They almost broke their bones,
So hard they tumbled on the stones.

Once with head as high as ever,
Johnny walked beside the river.
Johnny watched the swallows trying

Which was cleverest at flying. . . .
Johnny watched the bright, round sun
Going in and coming out—
This was all he thought about.
So he strode on—only think!—
To the river's very brink,
Where the bank was high and steep,
And the water very deep;
And the fishes, in a row,
Stared to see him coming so.

One step more! Oh, sad to tell!
Headlong in poor Johnny fell.
The three little fishes, in dismay,
Wagg'd their heads and swam away.
There lay Johnny on his face,
With his nice red writing-case;
But, as they were passing by,
Two strong men had heard him cry;
And, with sticks, these two strong
men
Hook'd poor Johnny out again.
Oh! you should have seen him shiver
When they pull'd him from the river.
He was in a sorry plight,
Dripping wet, and such a fright! . . .

* *Der Struwwelpeter* . . . Von Dr. Heinrich Hoffmann. Rütten und Löning. Frankfurt. [n. d.] Translation taken from *The English Struwwelpeter* . . . By Heinrich Hoffmann. Griffith Farran and Co. London. [n. d.] For a study on pictures illustrating this story, see *A Study on Children's Drawings*. By Earl Barnes. In *Pedagogical Seminary*. Vol. II, No. 3, p. 455.

In every way these pictures represent an advance upon Studies I and II. Profiles and full faces are used, according to convenience; arms and legs are no longer made with single lines; the figures are clothed, and the faces are full of expression. Still there is much that is purely diagrammatic, as in the foliage of the trees, or in the treatment of the flowers in 3 and 6.

The consistency from picture to picture of the series is marked. Thus, in the first two scenes, Johnny appears walking in the same direction, and the dog consistently comes to meet him; in each of these scenes we have the same stones and the same sun. In the last four scenes, again, the same bank, the same two trees, the same two flowers, and the same three fishes appear, and in similar relations. Throughout the series, Johnny keeps the same costume, even to the visor on his cap and the school-bag.

One can but note the growing carelessness of execution from the first to the last of the series. In the second picture the buttons have disappeared permanently from Johnny's shoes, and but one is left on his jacket, while the markings on his book-bag grow less prominent; still more notable, the two boys intended to deride Johnny only appear in the first scene, although demanded more in the second. The birds are omitted after the third scene, and any descriptive label after the fourth. The fishes lose their fins as the pictures progress, becoming mere symbols. Does this indicate mental fatigue, or the tendency to change pictures into signs or hieroglyphics? This modification seems to go along with the tendency to put the strong work into the central figure in each picture, and to reduce the side details, as trees and flowers, to mere symbols.

The consecutively numbered and placed pictures, each defined by a boundary line, the attempt to portray the ground, together with the consistency of detail before noted, indicate age and character. This is still more marked in the attention to detail, seen in the visor to Johnny's cap, the markings on his book-bag, the petals of the flowers, the fins of the fishes, and the buttons on the boys' jackets.

Educationally it is interesting to note that here is a boy of eight who has gone a long way, with no assistance, save that of a self-taught sister, toward the mastery of a means of expression that will give him constant and valuable exercise of all his powers. A few years ago we scolded and whipped children for such activity; to-day we must see in it a most valuable line of development.

A BAD (?) GIRL'S STORY.

V.—MY LIFE.

when I was about 11 years old my Father died and left my Mother seven children and I was the oldest. there was 4 boys and 3 girls. my papar was a commedion and he war not a very healthy man 5 mounts before his death he colled me to his bed side and ask me what would I do if he died and I answered him, I said papa you are not going to die and let Mamma alone then he went to slep and told me next morning to go and tell grandman to come down he wanted to see her then he told her that he was going to die befor night. so death came before night and called him away from us and mamma lay in bed sick oh what a sad night that was for us. Then two mounts after Mamma said that she could not supporte us all and she would hafter put three of my brothers away then that was and nother sad thing so she toll me three little brothers down to S. orpham home and they are there yet learning to grow up good arnest men. Then 3 days after that i went out to work and work until I was 15 years old in differince placers my last place was in a furniture store and I work 3 mounts their before i got accustomed to the place and Mrs. T. came in the morning before Thanksgiving and ask me if I could cook and I said yes mame thin she told me that Mr. T. was going to lock up the store to marrow and they ware going out boat sailing so next day bright early we all got up and she got the boys all ready and at 9 a clock they started for their day ferner and I had to get a big dinner for them so about 11 a clock i put on the turkey and the I had until 4 a clock to rest so then I began to think about thing that was not write and I knew where they kept their money and I took the key out of the bedrom door and unloch the closet wheir they keep their money and their was a bag of gold and a pag of silver but O how tempted I was I took a hundred dollars and wrap it up in a silk handkerchief and started for home but I knew better then to take it home for Mamma would send me back with it and then that would discrase me so i

be thought of a swamp and I started towards it and when i reached it i threw the handkerchief of gold into the swamp then started back to work when I reached hom their was not a sould their so i began to set the table and i did not thing any moor about the money when they got home the first ward that Mrs. T. said was Mary get dress and i will finish gitting sipper because i know you are tired but as she spoke thoes words tears came in my eyes; but it was no use beccause it was to late i done then deed and i knew that i must be punished for it but she did not know what I had done so I kissed her good night and home ward i started tired sleepy and sick so i lay for to week in bed with mamma and my little sister and brother we all had the lagrippe. but when I came hom that night mamma said what makes you so frightened and i said nothing abot what it had done only said that i felt sick.

The one week on a Monday morning a boy came to the door with a note in his hand and took it and told me that Mrs. T. wanted me and I knew right away what she wanted but poor Mamma thought she had a present to give me so i dressed and went down when I got their Mrs. T. came to the door and told me to come in and set down awhile.

—*By a girl fifteen years old.*

COMMENTS, SUGGESTIONS, AND QUESTIONS ON STORY V.

This autobiography was written by a girl fifteen years old who had been sent to a reform school. She wrote the story for her teacher as a piece of outside work, but owing to an interruption it was never completed.

Considered as evidence, the story told by this girl is difficult of interpretation. When she says, "I began to think about thing that was not write," and "me three little brothers . . . are learning to grow up good arnest men," and "death came before night and called him away from us," the expressions have an unchildlike ring, which makes one instinctively feel they do not represent the girl's own thought. But if the forms are sometimes dead and imitative, the facts themselves bear the unmistakable stamp of truth. The instinctive longing to possess the money without thought of what could be done with it, the aimless flight from the place of the theft, the sudden desire to be rid of the guilty burden,

the physiological effects of fear and excitement which made her tell her mother she "felt sick"—all are in harmony with human experience.

One of the most striking things in this story is the solitude of the little soul who writes, her utter lack of power to connect herself vitally with the people or the things around her. This is explained by the facts that she was the oldest of seven children, scattered by death and poverty, and that she was at eleven separated from the struggling mother. Circumstances threw her back upon herself before she had learned to know herself or the world. She worked, too, in different places from eleven to fifteen. This solitude is shown in her absolute concealment of her theft, although she evidently would have been very glad to have her mother or Mrs. T. help her undo the mischief.

Another thing which appears is a sort of stupidity or intellectual torpor. There seems to have been no intellectual motive for the theft, no cunning either to manage its mode or its results. Note, too, the illiterate and uncomposed nature of the writing. She does not seem to be able to see or to express the nature of the theft, and she seems quite unconscious of the fact which appears on the face of her narrative, that she is not guilty in any deep sense. To herself she offers no excuses, although they are plenty. She simply feels that she has been in the hands of terrible, mysterious, irresistible fate; and so it is.

Such a document, then, almost dictates to the teacher the course to pursue in this particular case. First, since all the characteristics noted above seem to result from a past environment of solitude and change, he will try to supply instead an environment social and permanent. Second, he will do all he can to awaken the intelligence of his pupil; he will appeal to the feelings as little and to the mind as much as possible. Does not the story suggest, too, that we may make confession easier by relaxing the severity with which we treat offences voluntarily acknowledged. When Mary says, "Tears came in my eyes, but it was no use beccause it was to late i done then deed and i knew that i must be punished for it," we are sure that childish fear of consequences, and not a depraved and vicious nature, kept the girl from telling her mistress the whole story.

DISCIPLINE AT HOME AND IN THE SCHOOL.

III. HOW TO STUDY THE SUBJECT.

In making an experiment or test in the field of discipline, the first thing required is a hypothesis or question to guide the inquiry. As outlined in the first number of the *Studies*, our question as investigators is: Does a child in the process of his development pass through different stages in his attitudes toward punishment; if so, what are these stages? And for purposes of action our question is: What is a child's attitude toward his own misdemeanors at any particular time?

As a preliminary to the direct study a careful writing out of our own reminiscences of early punishments will quicken our memories and adjust our minds to childish standards of thinking and feeling in this field. To be of value, however, such a self-study must be absolutely honest; our meanest as well as our best feelings must be set down and fairly contemplated.

But the one who must finally answer these questions is the child himself. If, however, we approach him directly and demand an explicit answer he cannot give it. Composition exercises give excellent opportunity for collecting materials indirectly. If such materials are to have any value, there should be no preliminary talk with your children about the subject. Have them take their paper and pencils and write their names and ages at the top of the sheets, so that you can afterwards classify the papers for sex and age. Then give them their subject and have them write without any talk or discussion. The following are the tests* I have used in the work of the last two years: Describe a punishment you have received that you thought was just and tell why you thought it was just. Describe a punishment you have received, which you thought unjust, and tell why you thought it was unjust. I

*For an extended line of experiments and tests see an article on Discipline in the Family and in the School, in the Transactions of the Illinois Society for Child-Study, Vol. I, No. III, p. 31.

do not believe we can limit the test more than this with advantage. It is true that children do not clearly understand the meaning of the word punishment. Many think it means simply whipping, and there is some trouble about the words just and unjust; but if the teacher explains these words he will unconsciously and certainly give a bias to the papers prepared by the children that will introduce an element impossible to estimate. Then, too, one is tempted to limit the cases to punishments received at school or in the home, or to those received during the past year, or else to have the children tell how old they were when the punishment was received, or whether they have since changed their minds concerning the justice of the punishment. Any of these restrictions, however, seem to me unfortunate in such a preliminary survey of the whole field as we are now making. The problem of self-expression in such a matter is difficult enough at best. Do not make it more difficult in this first test by imposing limiting conditions.

When you have collected your papers, read them over carefully and see what the difficulties are in the way of using them as evidence. How far do they represent the child's real feelings? How far are they attempts to be smart? How far are they attempts to settle old scores with you or former teachers? Write out your estimate of the value of the papers as materials for answering the two questions we have before us. Next month we shall publish some sample papers already collected, with an attempt to estimate their value as evidence. You can assist in the work by promptly sending us the papers you prepare concerning the value of your children's compositions as evidence, so that we can make our next issue representative of different points of view. Keep the compositions written by your children so as to compare your work with ours in subsequent issues. Address

EARL BARNES,

Stanford University, Calif.

HISTORICAL IDEALS AND METHODS OF CHINESE EDUCATION.

BY EARL AND MARY S. BARNES.

In our study on Aztec education¹ we have seen the immense power of that system in shaping a special national type. We now give a parallel study on the Chinese system to check or confirm the conclusions there reached.

We have here still richer and surer sources than in the case of Mexico. We have not only the classics used in Chinese education, accessible in Max Müller's edition of the sacred books of the East, but we have the accounts of numerous travelers and residents in China; most important of all, the system itself still exists in intimate living relations with the whole body of Chinese civilization. We could not ask for more.

It then remains for us to seek materials which can answer the questions by which we must examine every educational system; as we have seen, these questions run as follows:

What are the instruments of education employed,—the books, the buildings and apparatus, the masters? What is the content of education? What are its methods? To whom is education given? Who control and manage education? What differences appear in the treatment of the sexes or the classes? What is the aim of education, its ideal, its philosophy? What are its practical results?

To answer these questions, we turn first to the *Lǐ Kǐ*, the Rules of Propriety or the Ceremonial Usages, one of the earliest Chinese classics, sometimes referred to as The Book of Rites. The various books composing the *Lǐ Kǐ* have their origin before the time of Confucius, many of them going back to remote antiquity. Of the importance of the Sacred Books in education, Confucius said:—

"It is by the Odes that the mind is aroused: by the Rules of Propriety that the character is established; from Music that the finish is received."

And again:—

"Without the Rules of Propriety, respectfulness becomes laborious

¹ See *Studies in Education*, Aug., 1896, p. 73.

bustle; carefulness, timidity; boldness, insubordination; and straightforwardness, rudeness.”¹

In the *Lt Kt* the general principles on which education rests are thus expressed:—

“The Master said, ‘Now, filial piety is the root of all virtue, and the stem out of which grows all moral teaching. Sit down again, and I will explain the subject to you. Our bodies—to every hair and bit of skin—are received by us from our parents, and we must not presume to injure or wound them:—this is the beginning of filial piety. When we have established our character by the practice of the filial course, so as to make our name famous in future ages, and thereby glorify our parents:—this is the end of filial piety. It commences with the service of parents; it proceeds to the service of the ruler; it is completed by the establishment of the character.’”²

Propriety is seen in humbling one’s self and giving honour to others. Even porters and peddlers are sure to display this giving honour in some cases; how much more should the rich and noble do so in all! When the rich and noble know to love propriety, they do not become proud nor dissolute. When the poor and mean know to love propriety, their minds do not become cowardly.”³

These same points are further illustrated in another of the Classics:—

“The Master said: ‘The service which a filial son does to his parents is as follows: In his general conduct to them he manifests the utmost reverence; in his nourishing of them, his endeavour is to give them the utmost pleasure; when they are ill, he feels the greatest anxiety; in mourning for them dead, he exhibits every demonstration of grief; in sacrificing to them he displays the utmost solemnity. When a son is complete in these five things, he may be pronounced able to serve his parents.’”⁴

The following passage, again from the *Lt Kt*, gives a summary of the whole Chinese philosophy underlying education:—

“The ancients who wished to illustrate illustrious virtue throughout the kingdom first ordered well their states. Wishing to order well their states, they first regulated their families. Wishing to regulate their families, they first cultivated their persons. Wishing to cultivate their persons, they first rectified their hearts. Wishing to rectify their hearts, they first sought to be sincere in their thoughts. Wishing to be sincere in their thoughts, they first extended to the utmost their knowledge.”⁵

¹ The Sacred Books of China, translated by James Legge. In Sacred Books of the East, edited by Max Müller. Oxford, 1879-1894. Vol. xxvii, p. 1.

² From the Hsiao King, in Sacred Books of the East, vol. iii p. 466.

³ From Book 1 of the *Lt Kt*, in Sacred Books of the East, vol. xxvii, p. 65.

⁴ From *La Siao Hio*, ou *Morale de la jeunesse*, in *Annales du Musée Guimet*, Paris, 1889, tome xv, p. 76.

⁵ From Book xxxix of the *Lt Kt*, in the Sacred Books of the East, vol. xxvii, p. 232-4.

Concerning the relations of the State to education, the *Lt Kt* says:—

"Orders were given that, throughout the districts, the youths who were decided on as of promising ability should have their names passed up to the Minister of Instruction, when they were called 'select scholars.' He then decided which of them gave still greater promise, and promoted them to the great college, where they were called 'eminent scholars.' Those who were brought to the notice of the Minister were exempted from services in the districts; and those who were promoted to the great school, from all services under his own department, and by and by were called 'complete scholars.'

"The Grand Director of Music, having fully considered who were the most promising of the 'completed scholars,' reported them to the king, after which they were advanced to be under the Minister of War, and called 'scholars ready for employment.'

"The Minister of War gave discriminating consideration to the scholars thus submitted to him, with a view to determine the offices for which their abilities fitted them."¹

As to the order and content of studies, the *Lt Kt* tells us:—

"When the child was able to take its own food, it was taught to use the right hand. When it was able to speak, a boy was taught to respond boldly and clearly; a girl, submissively and low. The former was fitted with a girdle of leather; the latter, with one of silk.

"At six years they were taught the numbers and the names of the cardinal points; at the age of seven, boys and girls did not occupy the same mat nor eat together; at eight, when going out or coming in at a gate or door, and going to their mats to eat and drink, they were required to follow their elders:—the teaching of yielding to others was now begun; at nine, they were taught how to number the days.

"At ten, the boy went to a master outside and stayed with him even over the night. He learned the different classes of characters and calculations; he did not wear his jacket or trousers of silk; in his manners he followed his early lessons; morning and evening he learned the behaviour of a youth; he would ask to be exercised in reading the tablets, and in the forms of polite conversation.

"At thirteen, he learned music, and to repeat the odes, and to dance the *ko* of the duke of *Kâu*. When a full-grown lad, he danced the *Asiang* of *King Wu*. He learned archery and chariot-driving. At twenty, he was capped, and first learned the different classes of ceremonies, and might wear furs and silk. He danced the *tsi Asia* of *Yü*, and attended sedulously to filial and fraternal duties. He might become very learned, but did not teach others;—his object being still to receive and not to give out.

"At thirty, he had a wife, and began to attend to the business proper of a man. He extended his learning without confining it to particular

¹ From Book iii of the *Lt Kt*, in *Sacred Books of the East*, vol. xxvii, p. 232-4.

subjects. He was deferential to his friends, having regard to the aims which they displayed. At forty, he was first appointed to office; and according to the business of it brought out his plans and communicated his thoughts. If the ways which he proposed were suitable, he followed them out; if they were not, he abandoned them. At fifty, he was appointed a Great officer, and laboured in the administration of his department. At seventy, he retired from his duties. In all salutations of males, the upper place was given to the left hand.

"A girl at the age of ten ceased to go out from the women's apartments. Her governess taught her the arts of pleasing speech and manners, to be docile and obedient, to handle the hempen fibres, to deal with the cocoons, to weave silks and form filets, to learn all woman's work, how to furnish garments, to watch the sacrifices, to supply the liquors and sauces, to fill the various stands and dishes with pickles and brine, and to assist in setting forth the appurtenances for the ceremonies.

"At fifteen, she assumed the hair-pin; at twenty she was married, or, if there were occasion for the delay at twenty-three.¹ If there were the betrothal rites, she became a wife; and if she went without these, a concubine. In all salutations of females, the upper place was given to the right hand."²

The extent to which the ideas of the *Li Ki* are perpetuated in modern Chinese education is well illustrated in the account written by the missionary Huc:

"China is certainly that country where primary instruction is the most widely extended. When a school is to be established the heads of villages of the various parts of the town come together, decide on the site, the choice of a master, the matter of salary and the time of opening the school; the government can have only an indirect influence over the schools through the examinations to which those must submit who wish to enter into the corporation of lettered men. The teacher most frequently resides in the pagoda and lives on a fixed endowment or a sort of tithe which the farmers engage to pay after the harvest.

The Chinese instructor must teach his pupils politeness, the necessary etiquette of the house and the street, and must then teach them to recognize the Chinese letters, to pronounce them well, and to trace them with a pencil; that is the foundation of their education,—the little Chinese is at first trained to trace, and when his control of the pencil is very good, he is allowed to copy independently until he gradually reaches the finest models. The teacher corrects his work with red ink.

"The Chinese attach a great value to a beautiful hand-writing. As for pronunciation, the master first reads a certain number of characters to his pupils; and they, returning to their places, begin to repeat the lesson singing and swaying back and forth, which introduces an indescribable uproar

¹ Such occasions arose from the death of parents.

² From Book x of the *Li-Ki* in *Sacred Books of the East*, vol. xxvii, pp. 476-9.

into the class; but it would seem that this way of learning is less wearisome. When a lesson is learned, the pupil recites it, turning his back to the master, who holds the book. The word recite in Chinese . . . is rendered by the phrase, 'to turn one's back to the book.'

"The first book that is given to children is a sort of cyclopedia, or admirable summary of all the subjects which make up Chinese knowledge. . . . It treats of nature, of the various ways of education, of the importance of social duties, of numbers and their production, of the three great powers, of the four seasons, of the five cardinal points, of the five elements, of the five constant virtues, the six sorts of grain, the six classes of domestic animals, of the seven dominant passions, of the eight notes of music, of the nine degrees of relationship, of the ten duties relating thereto, of studies and academic acquisitions, of the succession of dynasties, and the book ends with reflections and illustrations in regard to the necessity and importance of study."¹

Returning now to our questions, we find that even with so small a body of evidence before us, we are able to answer them intelligently. We see that as to the instruments of education, they consist of books, bodily exercises, personal instruction and example. If books, they are classics, that is, a body of literature in a dead language, accepted as ideal by generations of men; if bodily exercises, they are sacred and ancient dances, fixed ceremonials, or definite and useful activities, as archery or weaving. The teachers are elders, already fixed in their customs and notions; the boys are taught at home until ten and then go to regular schools, where they receive instruction from formal teachers. The girls remain at home under the tutelage of the women.

Inquiring still more particularly into the content of instruction, we find the following lists of subjects taught:

To boys and girls together:—Manner of speech, cardinal points, numbers, precedence of elders, order of days.

To boys, after nine:—Reading, calculation, the behavior of youth, the forms of polite conversation, music, sacred dancing, the body of sacred literature, archery, chariot driving, polite ceremonies.

To girls, after nine:—Pleasing speech and manners, obedience, weaving of linen and silk, sewing, cooking, the service of sacrifices.

Looking at the facts as a whole, we find here a great democratic system of education, mainly planned for boys, aiming at the exact perpetuation of a body of morals and manners. The morality

¹ Quoted in *Dictionnaire de Pedagogie*, by F. Buisson, Paris, 1882, vol. i, p. 379, from Huc, *L'Empire Chinois*, ch. iii. See also in translation, Huc, *The Chinese Empire*, London, 1855, vol. i, p. 110, *passim*. For an authoritative secondary treatment of the whole subject, see *The Chinese: their education, philosophy and letters*. By W. A. F. Martin. New York, 1881.

inculcates as its chief virtues obedience to parents, due respect to every human being, the power to live smoothly and happily with others, a power acquired, according to the Chinese code, by obedience, love and respect. Women should possess these virtues in their extreme forms, and add modesty and domestic industry; while men should add to them the greatest possible amount of scholastic and ceremonial lore.

Such are the aims of the philosophy underlying the Chinese education. That philosophy is eminently practical and social, and seeks to fit every individual into his society without shock to himself or jar to the whole.

How has it succeeded in these aims? Admirably, as a contemporary Chinese writer says:—

"Our ancient national program perfectly fulfills the object for which we intended it. In effect, this program develops in the highest degree public and private morality. It inculcates upon us, with the worship of the family and respect for parents, the love of our neighbor and the desire to be happy through the happiness of all. . . . This remote past has bequeathed to us a doctrine of incessant progress, admirably suited to our natural genius. It has taught us that the family should always keep the happiness of all its members in view, that each individual should interest himself in the lot of all his fellow human beings—in a word, that the supreme object of Government is the happiness of the people."¹

As this system of education has succeeded among the Chinese, so a similar system has succeeded among the Japanese;² so a similar system succeeded among the Ancient Aztecs. We must confront ourselves with the actual fact that here we have whole races imbued with graces and virtues on which we place the highest value, and that these virtues have been gained by a conscious, careful course of training. How then? Are we right or are we wrong in thinking ourselves the wiser in our systems of education? Surely it is good to be loving, industrious, docile, courteous, harmonious with one's social environment, and especially to have other people so? Yes, the Occident must surely answer to the Orient; but she may pointedly ask in turn: Surely it is a good to be free, inventive, self-directive, true; in short, to have the power of initiation? The Orient must in its turn answer Yes. These questions and answers mutually criticise each other. The East on her side must confess

¹ General Tcheng-Ki-tong. *Asiatic Quarterly Review*, Calcutta, April-June, 1891.

² See on this point, *Glimpses of Unfamiliar Japan*. By Lafcadio Hearn. 2 vols. Boston and New York, 1895, vol. II, pp. 430-491.

that her systems of education tend to allow, if not to cherish, such faults as servility and double-dealing, while they actually crush out the inventor and the variant, in a word, the hope of progress. The West, on her side, must note the fact that her systems develop arrogance, self-conceit, angularity and eccentricity, and, still more serious arraignment, that they actually discourage love, patience and courtesy, in a word, social harmony. Each stands confessed right, and each wrong. Is it then possible to get the good without the evil of each system? Can human beings be at the same time free and loving, inventive and industrious, docile and independent, in harmony with their social environment and yet capable of initiative? Or must we go on, asking the Orient and women to give us one side of existence, and the Occident and men to give us the other?

The influence of conscious education as environment is mighty. In this study we have seen this environment actually *making* men, and constantly making men—millions of them, after a desired pattern. No wonder, then, that the temptation is great to use education as a man-forming agent. But suppose instead, we use it to supply that social and mental environment which will give the largest possible number of choices, and which will give the food which human nature requires when unforced? Would it not then make *men*? Or does manhood require some more strenuous conflict with the obscure, the evil, and the painful?

NOTES.

Illinois Society. The Illinois Society for Child-Study has now published five numbers of its Transactions. They are prepared by the best men in the field of child-study, and they give suggestions for investigation, with special studies in particular fields and full summaries of work so far accomplished in the field at large. The numbers retail for fifty cents each, but the five numbers are sent to all members of the society, and membership may be secured by sending one dollar to C. C. Van Liew, Normal, Ill. No teacher who wishes to keep informed concerning recent movements in educational work can afford to be without these publications.

Child-Study Number. The Northwestern Journal of Education published in July a child-study number of fifty-two large pages. This number was edited by Professors H. K. Wolfe and G. W. A. Luckey, of the State University of Nebraska, and is a valuable addition to the literature of our subject. The material is popular and yet sound. The number can be had for twenty-five cents from J. H. Miller, Lincoln, Neb.

A Children's Publication. Three of our children at the University have just started a paper which they call Little Nonsense. It is made up of stories, poetry and drawings, all prepared by the children themselves. It is nicely printed, in a little booklet of twelve pages, and will prove suggestive to pedagogues. Six cents in stamps sent to Elsie Branner, Stanford University, Cal., will secure a copy.

Official Child-Study. The Department of Education of the State of New York has recently published a reprint of a part of its annual report, called Exhibit No. 18. Child-Study. It is a pamphlet of seventy-five pages and contains a good deal of valuable material. It has a report by Prof. Chas. H. Thurber on the work in child-study being done in New York under the direction of the Department of Education, a very suggestive preliminary study of Children's Hopes, by J. P. Taylor, summaries of several important studies on children, reprints of syllabi, and an extended and excellent bibliography of child-study.

Children's Reading. In Miss Smythe's "Old Time Stories Retold by Children,"* we find a new help towards solving the problem of children's reading through actual work with the little ones themselves. The stories—fairy-tales and myths—are the originals revised, according to the manner in which they were reproduced by various children. As Miss

* Smythe, E. Louise. A Primary Reader. Werner School Book Co. Chicago and New York. 1896.

Smythe has assumed that it is desirable to acquaint children early with a certain class of literature, little light is thrown on the question of *what* we are to give children to read. The value of the volume lies rather in suggesting *how* we can best present to children what we do wish them to read—the book itself being such a presentation. This study confirms one of the principal conclusions of my study on “Children’s Own Stories” in the July number of this journal. It is that children like to have the main action of the story hurried forward as much as possible—a fact which makes them impatient of long descriptions or other accessory details.

CLARA VOSTROVSKY.

Studies in Education

IV.



STUDIES IN EDUCATION

EDITED BY
EARL BARNES,
Professor of Education in Leland Stanford Junior University.

OCTOBER, 1896.

	PAGE.
A STUDY OF CHILDREN'S SUPERSTITIONS—Clara Vostrovsky'	123
REMINISCENT STUDY: IV. CHILDREN'S COLLECTIONS—Earl Barnes .	144
TWO LITTLE BOYS' STORIES	147
DISCIPLINE: IV. EXAMINATION OF THE EVIDENCE—Earl Barnes . .	149
HANNS GUCK-IN-DIE-LUFT: II. (Illustrated)	154
THE NEW ENGLAND PRIMER—Agnes Sinclair Holbrook	156

VOL. I.	STANFORD UNIVERSITY.	\$1 a Year.
No. 4.	1896.	15 c. a Copy.

STUDIES IN EDUCATION.

These studies begin with July, 1896. They will be continued as a monthly publication for ten numbers, and will then stop. The last number will contain an index, and a full table of contents. The cost for the year is one dollar, or fifteen cents a number. Address all inquiries or subscriptions to

EARL BARNES,

Stanford University,

California.

Entered at the Post Office in Stanford University as Second-class Mail Matter.

A STUDY OF CHILDREN'S SUPERSTITIONS.

CLARA VOSTROVSKY.

George Eliot says somewhere that a peasant can no more help believing in traditional superstitions than a horse can help trembling when he sees a camel. But this is not only true of peasants: it is true in a modified degree even of us who boast of standing on the "tip-top round of civilization." We can, it is true, smile when we see the moon over our left shoulder, and repress without any exertion the desire to wish on the evening star, but many among us will hesitate when forced to begin a journey on Friday, and be full of sad forebodings because we have dreamt of a joyful wedding.

Since this is true of us, with all our vaunted knowledge, we may certainly be expected to look with sympathy upon the superstitions of children, to whom the world is as yet full of greater and stranger mysteries. As educators, we are not interested simply in particular phases of childhood. We are interested in all that concerns children. Certainly, then, there is no reason why the superstitious feelings, in the midst of which our pupils live, should not seem to us of fully as much importance in helping us to deal intelligently with them, as any problem of perpendicular or slant writing, or of poor spelling. The following study was made from a desire to understand these feelings better, since on them are so often based the ideas and ideals that determine the child's future actions.

Material for Study. The papers on which this study is mainly based, deal in reality with two studies (here combined into one), the first being in regard to a particular superstition, that of pin-luck, and the second in regard to superstitions in general. These papers were mostly gathered through the following syllabus sent out from Leland Stanford Jr. University to various schools in California:

CHILDREN'S SUPERSTITIONS.

As a composition exercise, please have your children write on the following story and questions. Have the age and sex of the writer indicated on each sheet.

1. I was out walking with my friend, Johnny H., when he suddenly

stopped, and walked around a pin on the ground. When he had reached a certain point he stooped and picked it up, saying: "That's for luck!"

Now I want to know just what pins have to do with luck. What do you know about it? Where did you first learn it? Have you any reason for thinking it true or not? State why?

2. What other superstitions do you know? Give definitely what reasons you have for thinking each true or not true. How did you learn of each?

Six hundred and twenty-four papers were collected on pin luck and 692 papers on superstitions in general, 358 of the former being from girls and 266 from boys, and 346 of the latter being contributed by each sex. These papers vary greatly, from those in which the pupil answers definitely and conscientiously what he has been asked, to those in which the pupil confines himself merely to giving a list of the signs he knows. A small number seem to be influenced by suggestions on the part of the teacher, but with the exception of papers from two schools where this was so plainly marked that there could be no doubt about it, all were collated. It is hoped that a sufficiently large number of papers has been collected and the work well enough done to eliminate in a large measure any untrustworthy results.

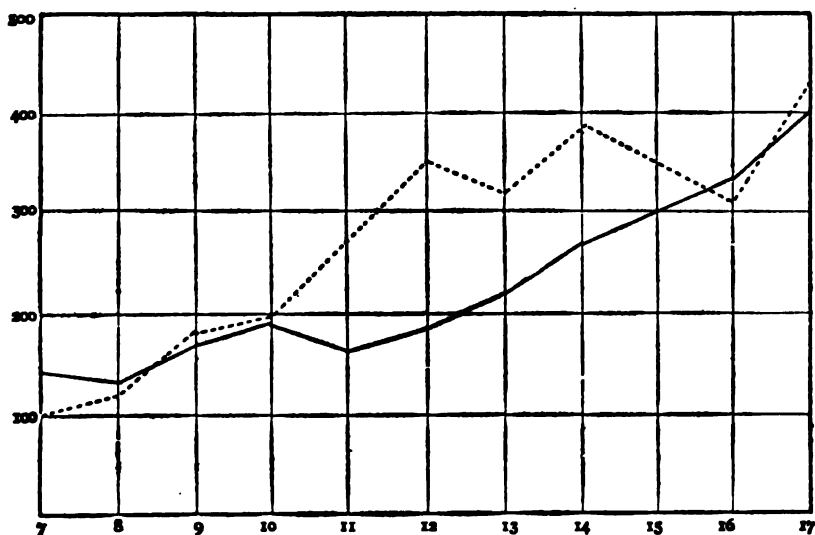
The total number of superstitions given is 1641, which includes not only all the different superstitions, but all the times each of them is given. Here we find the first prominent difference that comes out in this study between boys and girls, for only 661 superstitions of this number are mentioned in the boys' papers, while 980 are found in the girls', a difference of 319 superstitions in favor of the latter. The supposition that this really indicates something in regard to the sexes, is strengthened by the special study on pin luck, in which as large a number as thirty-six variations for that simple superstition are given by the girls, while only thirteen variations are mentioned by the boys. In classifying the superstitions, too, according to sex, 247 different superstitions (besides their variations) are found to be given by girls, and 198 by boys, here again the larger number being given by the girls. There is nothing to show that this difference means that boys believe less than girls in the superstitions they know; it seems to indicate only that for some reason, boys find a smaller number of luck signs (perhaps mainly used for special occasions) quite satisfactory. Only thirteen boys and thirteen girls declare they do not know any superstitious lore.

TABLE SHOWING NUMBER OF PAPERS, AND NUMBER OF SUPERSTITIONS GIVEN AT DIFFERENT AGES.

Ages		7	8	9	10	11	12	13	14	15	16	17
Number of Papers . . .	Boys	5	9	34	47	73	55	31	28	35	9	7
	Girls	1	21	35	52	48	50	51	44	30	8	6
Number of Superstitions	Boys	7	12	58	88	121	100	66	78	76	27	28
	Girls	1	26	63	103	131	163	160	169	112	27	25
Superstitions reduced to Scale of 100	Boys	140	133	171	187	168	182	213	279	217	338	400
	Girls	100	119	197	198	273	350	314	384	373	337	417

The superstitions given at various ages, as well as all other results when possible, have been reduced to a common basis of the same number of papers for each sex and age, from the seventh to the seventeenth year, and the results have been charted. The following chart, based on 333 papers from each sex, shows more clearly than the mere figures in the table can, the gradual increase in the number of superstitions given by the children from year to year.

CHART SHOWING INCREASE WITH AGE IN THE NUMBER OF SUPERSTITIONS GIVEN BY CHILDREN.
 — Boys.
 - - - Girls.



This increase is so steady on the whole that it does not seem due merely to the child's ability to express himself more easily as he grows older, but to his actually acquiring more superstitions. The greater number of superstitions given by girls at almost every age is marked.

Classification of the Superstitions. An interesting result that comes out in going over the papers, is the fact that the superstitions of the sexes are quite distinct in character,—157 of the 346 different superstitions being mentioned by girls and not by boys, and 107 by boys and not by girls, the smaller remainder being mentioned by both. Thus, a boy will laugh when he sees his sister counting the number of peas in a pod, and remark, perhaps, with a superior, condescending air, that “girls *will* be so superstitious,” although at the very moment he may be toying with his favorite marble, the “taw” he always uses when he wishes to win the marbles of the boy across the way.

Some minor differences that come out between the superstitions of the sexes are interesting. Thus, girls give several superstitions regarding babies, boys give none. Girls give nine superstitions regarding dress, boys but one, and that characteristic: “Eat off a butterfly's head and you'll get a new suit, the color of the butterfly.” Boys mention carrying around charms of different kinds, girls not. Then, too, spit plays a more prominent part in the boys' papers, and many more boys state their superstitions negatively.

But this difference in superstitions is not entirely a matter of sex, for, easily as superstitions are learned, and contagious as they apparently are, the close personal connection between superstitions and their possessors is seen in the fact that sixty-three per cent. of all the different superstitions given by girls, and seventy per cent. of all given by boys, are mentioned but once. Even members of a family are apt to have their separate superstitions, and this is much more true of classmates and friends. But while this would show that most superstitions are private affairs, as it were, we do find some which are very certainly common property. The most common of these, with the exception of pin luck, is that of picking up a horseshoe,—this being described by 151 boys and 128 girls. No other one superstition seems to possess in any similar degree the great charm found in horseshoe and pin-luck, and no other seems to have so many variations; the one that comes the nearest, is the belief in regard to

breaking a looking-glass, which is mentioned by sixty-three girls and twenty-six boys. There are many different superstitions regarding company, wishes, death, and marriage.

The superstitions, as a whole, easily divide themselves into three large classes: 1st. Superstitions regarding ghosts, spirits, fairies, etc.; 2d. Superstitions of divination, both personal and impersonal; 3d. Superstitions of charms, sorcery and magic. These large divisions in turn subdivide themselves into several smaller classes.

I. *Superstitions of ghosts, spirits, fairies, etc.*—Judging by our papers, this class does not play a very serious part in the present generation, although it might be objected with some justness, that it is not more largely represented, because it does not occur to many children to class these superstitions with the others. Only eighteen cases which can in any way come under this heading are found among girls, while thirty-five,—almost twice the number,—are found among boys. Boys, too, bring in witches' spells, etc., incidentally, as girls do not, so that it seems probable that this class exercises a greater fascination over boys than over girls. This, of course, may be due to boys being allowed to remain out, as a rule, much later than girls at night, the time in which the spirit world holds its own peculiar sway.

II. *Superstitions of divination.*—This division of superstitions consists of two large subdivisions: 1. Personal divination,—things done personally to foretell events; 2. Impersonal divination,—which includes especially the large body of signs, through the noting of which the future may be awaited without suspense. The first class differs in complexity, from merely counting the leaves of the marguerite, "he loves me, he loves me not," to eating eggshells and salt till one can eat no more; then, in the middle of the night, taking a candle and holding it before a mirror until one sees the face of him whom Fate has decreed that she shall wed. This class is seldom practiced by children for any purpose, except to determine affairs of the heart, or something of equal importance, in the future that awaits them. And, here again, a difference between boys and girls appears, girls mentioning superstitions regarding love and marriage in twenty-eight instances, and boys in but two. If

one will consult books dealing with folk-lore, he will find that even among the peasantry, maidens alone, as a rule, are credited with practicing this class of love-lore.*

Turning to impersonal divination, the class of signs, we find this division most common of all; and no wonder, since there is room for signs anywhere, and at any time, from the dreams that will come, to the killing of even the most obnoxious of spiders. Three hundred and fifty-two superstitions in this class are mentioned by boys, and 657 by girls. The classification here has been more loose than in any of the other cases, a small number belonging more rightly under the heading of "Power in action, objects, etc." But had these been so classified, while it would have given a little more importance to this last-named class, it would still have left the greater number of superstitions under the heading of impersonal divination. It is interesting to note, too, that this class is the last to disappear from civilization, as the small army of astrologers, chirosophists, and other fortune tellers in our large cities abundantly testify. The table of all the classes (p. 130) shows what the main lines of interest are here. Signs concerning love, it will again be noted, are more frequently given by girls. Signs signifying company are interesting to both sexes. Those regarding the possibilities of the weather hold their own. But most of all to be feared, and anticipated, if possible, are indications of coming death and disaster, or general ill-luck. Poor little children, there are so very many of these to darken their ignorant and already fear-clouded minds!

III. Superstitions of sorcery, charms, and magical power.

1. Charms, etc., practiced as such. 2. Magical power in actions, objects, etc. The first of these two classes, which is concerned with things done personally to bring about wished-for results, deals entirely with good things, the nearest approach to evil being in its prevention, as carrying potatoes in one's pocket to keep off witches. Unlike the men and women of whom we read in tales of ancient times, California children seem to have quite enough to do with practicing sorcery for their own precious sakes, let alone practicing it to bring misfortunes on others. Of all things, general good luck

*See, for instance, *The Folk-Lore of Plants*. By T. F. Thistleton Dyer. N. Y.: D. Appleton & Co. 1889, chap. viii, on Love Charms.

seems most desired,—158 superstitions in regard to it being given by girls, and 175 by boys. The granting of wishes ranks next in importance,—sixty wish superstitions being mentioned by girls, and thirty-six by boys.

Just what we have classified into our second small class, we can best illustrate through examples. We have, for instance, the common saying, "Speak of the devil, he's sure to appear," the power being supposed to lie in the naming. Again, all of us know how opals, through something we know not what within them, are popularly credited with power for evil. Neither of these superstitions, and none similar to them, quite belong in any of the other classes.

Right here, in connection with the supposed power of the opal, the question is suggested of how far children see life in inanimate objects. This not only meets us here, but again in the horseshoe, which we are told to turn up, "so that the luck won't run out," and again, in pin-luck, where we are warned to use a similar precaution. Probably the idea of connecting the supposed virtue, luck, with life, is not very clear on the whole in children's minds, yet I believe that in a sort of indistinct way it does exist. This was true, at least, in regard to my own feeling for the evening star, on which I never wished without a half-real dread of some possible personality residing within it.

Next in importance to the difference between boys and girls as seen in the classification, is the difference that comes out between children of seven, eight and nine years, and those older. Up to the tenth year the superstitious lore is extremely simple in character, such as, for instance, that birds can easily be caught "by putting salt on their tails." There is less definiteness, too, in the things desired or not desired. Neither love nor marriage are mentioned at all, while death plays a very unimportant part. Fear of ghosts, too, seems hardly to have appeared, they being mentioned during this time but once by girls, and once by boys. On the other hand, beginning with the tenth year itself, the signs become more complex and a little less general in content. Love now begins to play its part, and death likewise begins to be feared. Ghosts, too, become more prominent.

We have a good deal of stress placed on the various changes taking place in the lives of children during the time of adolescence, but very little has yet been said of an earlier change, which, when

we know more about it, may prove of quite as great importance. It is the change from childhood to boyhood, as the later change is that from boyhood to youth. It comes out prominently in most of the figures and charts connected with this study.*

TABLE SHOWING CLASSIFICATION OF SUPERSTITIONS.

	Girls.	Boys.
I. Superstitions of Ghosts, Fairies, Etc.	18	35
IIa. Personal Divination—		
Love and marriage	28	2
The future	2	1
Miscellaneous	1	1
Total	31	4
IIb. Impersonal Divination—		
Love, etc.	34	12
Weather	21	16
Company	115	55
Death and disaster	65	41
General ill-luck	210	110
General good-luck	62	47
Miscellaneous—		
Good signs	33	14
Bad signs	99	43
Indifferent signs	18	14
Total	657	352
III. Sorcery and Charms—		
General good-luck	158	175
Wishes	60	36
Finds	20	17
Cures	10	7
Prevention of evil	8	3
Love desires	3	
Luck in marbles and fishing		8
Miscellaneous	18	13
Total	277	249
IV. Power in actions, objects, etc.	3	5
Entire total	986	645

* See especially the charts on belief and disbelief. It is this same age that Prof. Barnes calls the "critical period" of childhood in his study of children's theological ideas. He also calls attention to it in his study of children's drawings. See *Theological Life of a California Child*, and *A Study of Children's Drawings*, both in *Pedagogical Seminary*, vol. ii, No. 3.

Sources of Superstitious Lore. Like other traditions, superstitions are learned mainly through personal communication, for despite the fact that so many find their way to our newspapers and magazines, it is only when some one is willing and probably anxious to vouch for them that they leave much impression on our minds. Just from whom the superstition is learned is, however, often forgotten, so that it is not strange to find quite a number of children saying merely that "people" or "some one" told them of such or such a saying. Nevertheless, the number of definite sources given is sufficient on which to base conclusions. The following tables show the relative importance of the different sources:

TABLE SHOWING WHERE SUPERSTITIONS ARE LEARNED.

Total number of definite places . . .	{ Boys 193 = 100 per cent.	
	{ Girls 189 = 100	"
From parents or relatives	{ Boys 103 = 53	"
	{ Girls 96 = 51	"
From schoolmates or friends	{ Boys 68 = 35	"
	{ Girls 62 = 33	"
From reading	{ Boys 13 = 7	"
	{ Girls 18 = 9	"
From miscellaneous sources	{ Boys 9 = 5	"
	{ Girls 13 = 7	"

TABLE SHOWING IMPORTANCE OF DIFFERENT RELATIVES AS DISSEMINATORS OF SUPERSTITIONS.

Total ascribed to relatives	{ Boys 103 = 100 per cent.	
	{ Girls 96 = 100	"
Mother	{ Boys 27 = 26	"
	{ Girls 32 = 33	"
Father	{ Boys 8 = 8	"
	{ Girls 7 = 7	"
Sisters	{ Boys 6 = 6	"
	{ Girls 14 = 15	"
Brothers	{ Boys 13 = 13	"
	{ Girls 4 = 4	"
Other relatives	{ Boys 49 = 47	"
	{ Girls 39 = 41	"

These per cents. show that relatives and schoolmates are the two most important sources of superstitious lore, the former being even more prominent than the latter. This difference in favor of the school would not, however, have been so great had only home

relatives been included in the classification. My reason for placing outside relatives with those of the home was not only because of their nearness to the child in contrast with outsiders, but also because of their often being, as a matter of fact, really members of the child's home. The second table shows their relation to the others.

In this field, at least, the pre-eminence of the mother over the father comes out strongly. It is interesting, too, to note that girls seem more apt to learn superstitions from their sisters, and boys from their brothers. This not only may be partly due to the difference in the superstitions of the sexes, but no doubt largely helps in preserving this difference.

Some work was done in contrasting the superstitions acquired from relatives and those taught by schoolmates or friends. Taking the chief superstitions given by girls, it was found that in the looking-glass superstition, relatives were named as responsible twelve times, while schoolmates were not connected with it at all. The most prominent company superstition, too, that "a dropped knife denotes a man coming, a dropped fork, a woman," was ascribed eleven times to relatives and but once to a school-fellow. On the other hand, the popular belief that a quarrel will result if two people go on opposite sides of anything, was credited to schoolmates only. This is valuable only because the one conclusion possible indicates that the classification of the papers was accurate, this general and almost self-apparent conclusion being that superstitions are most often learned where the circumstances on which they are based are most apt to occur. Thus, one is not liable to break a looking-glass at school, nor are posts and trees so apt to interrupt one's walk with a friend as at home.

All this is in regard to where the superstition was learned, for the real origin lies, of course, back of that. The mothers, schoolmates, and others do not, as a rule, make up the superstitions. They simply pass on what they have themselves acquired. As a special study, forty children were asked if they had ever made up any superstitions. Although all were ready to give the signs in which they believed, but five answered that they had, the thirty-five others denying ever having done so. This would indicate that, like primitive peoples in general, children are more imitative than creative. And yet the conclusion, at least in the case of children, is

rather misleading, for they adapt and readapt their superstitions to suit various occasions and needs, besides, I am sure, creating some which are quite their own. Thus, a little girl, who seems to me no exception, has made up her mind—quite by herself—that if she does not skip some step as she goes down stairs some calamity will happen to her. I have seen boys, too, throw a stick against a tree, their ability or inability to hit a certain spot denoting good or bad luck. It may be, however, that these self-invented signs are too simple and unstable in character to be permanent, or that being invented for a particular occasion, they depart with it. This is only a suggestion; for, however it may be, as long as they do last, there is no doubt of their being quite as real to the child as those handed down to him from “generations long gone by.”

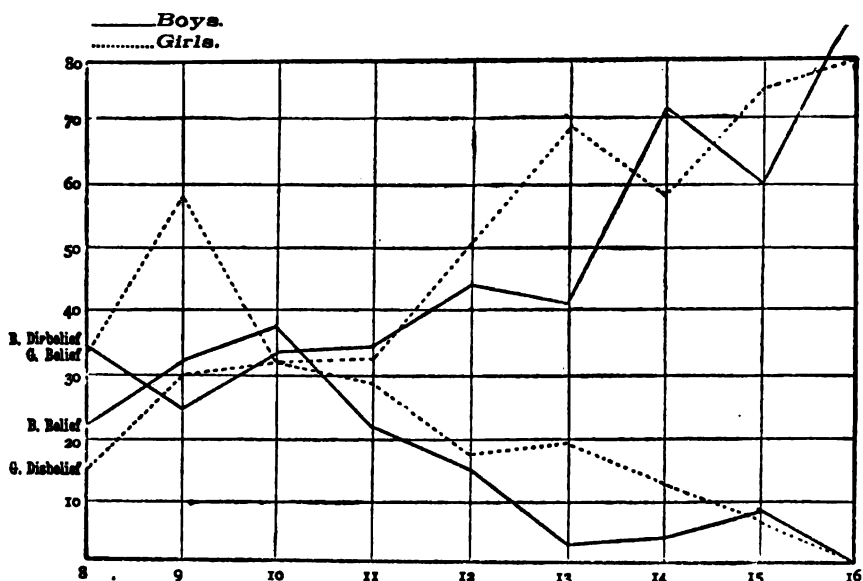
Credence in Superstitions. We have already said above that the superstitions with which we have worked are, for the most part, mere survivals, which have come down to children quite like the traditional games with which they are all so familiar. Like the games, these superstitions have often lost their original significance, and exist only as mere forms. Thus, to the boy or girl, there is no spiritual power connected with the saying that if you “rock an empty cradle the baby will have the colic,” as there must have been when it was the property of our ancestors. Yet, like these ancestors, the child has no conception of the power of the mind to think or act without a corresponding outside reality; and as most traditional superstitions, like his own invented signs, are based on ideal association, they appeal naturally to him. Such superstitions are, as a rule, due either to mere analogy, as when a child tells us that if he plays the death of a person, that person will really die; or, to direct symbolism, which is best exemplified by omens from dreams.

But it is not only the fact that superstitions seem rational that makes them play so important a part in child-life; it is also largely the charm of the rites and ceremonies connected with them, that attract children to them. These ceremonies are either simple and self-explanatory, as picking a pin up by the point “so that the luck won't run out,” or, complex and exciting, as the following wart cure given by a boy of twelve, abundantly shows: “If a person has warts, he should get a dead cat, and go to the graveyard at midnight. From the middle of the yard shut your eyes and walk six steps, swing the cat around your head twice, and throw it away as far

as you can, and say: 'Go away cat, go away warts,' and then walk away without looking where you threw it, and the next morning your warts will be gone,— if you do it right.' There can be little doubt of what it is that attracts the small boy, at least, to this particular case.

Since children are now generally supposed to pass through the different stages of the race, it is natural to find that the number having total belief in superstitions decreases with the age, while the number having total disbelief increases. Both the pin-luck study and the general study agree in this, the change from belief to disbelief occurring in each about the tenth year. This, as is quite natural, is seen somewhat better in the charts based on the one superstition; hence, although the difference between them is not material, they will be given the preference here.

CHART SHOWING CHANGE FROM BELIEF TO DISBELIEF IN PIN-LUCK.



As many children are quite as dogmatic in their total disbelief as in their total belief, other charts were made, that there might be no doubt of the growth of the critical spirit as children become older, these latter charts being based on the number of superstitions

described as true, or untrue, at the different ages. These charts are, necessarily,—since they deal with many superstitions,—from the general study.

TABLE SHOWING THE NUMBER OF SUPERSTITIONS DESCRIBED AS TRUE AND UNTRUE. REDUCED TO SCALE OF 100.

Ages		8	9	10	11	12	13	14	15
Girls	True Superstitions	108	54	80	50	39	29	25	14
	Untrue Superstitions	46	70	45	53	50	85	88	105
Boys	True Superstitions	50	52	48	53	66	33	36	21
	Untrue Superstitions	57	67	45	80	73	74	109	136

CHART SHOWING THE NUMBER OF SUPERSTITIONS DESCRIBED AS TRUE AND UNTRUE.—BOYS.

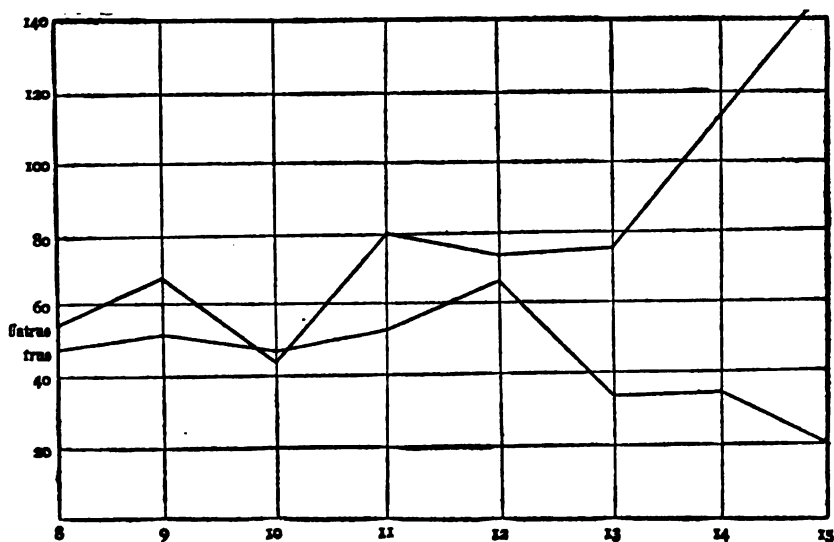
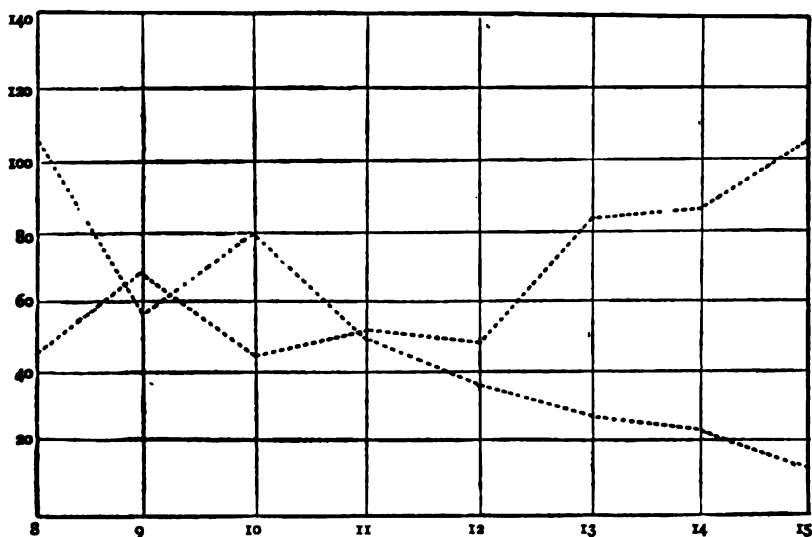


CHART SHOWING THE NUMBER OF SUPERSTITIONS DESCRIBED AS TRUE AND UNTRUE.—GIRLS.



The fact that these last charts were thought desirable shows that when we speak of children passing through a 'superstitious age,' we do not necessarily mean that they believe without distinction in every kind of superstition; for, as a rule, this is far from being the case, it being much more common to find disbelief in some absurd superstition going along with absolute faith in some others no less absurd. Few children know how to generalize. Each case is a separate case to them, to be judged quite on its own merits, and these merits can only be satisfactorily proven to the child through some practical test. For, strange as the idea at first seems to us, belief or disbelief in superstitions does not depend so much on their seeming reasonableness or unreasonableness as on their proving true in some way or failing to do so. This would be very encouraging were it not for two reasons. The first is that children are too easily satisfied with one trial alone, which is exemplified in the children's papers by many saying they know it's true "because they tried it *once* and it proved true." The second reason is the large incapacity of children to appreciate negative evidence. Having decided to their satisfaction that a superstition is true, they, most happily for

the faith, ignore all cases showing it to be otherwise. This is more or less true of all minds in proportion as they are undeveloped. After the ninth year, when children give a reason for disbelief, we find again the same reference to experience. The following per cents based on the actual number of reasons given, show how naturally and forcibly this, as a reason, appeals to children:

TABLE SHOWING REASONS FOR BELIEF.

(Based on 117 definite cases from boys and 146 from girls.)

Proved true	{ Boys 108 = 92 per cent.
	{ Girls 135 = 95 "
Some one said so	{ Boys 8 = 7 "
	{ Girls 6 = 4 "
Miscellaneous reasons	{ Boys 1 = 1 "
	{ Girls 1 = 1 "

TABLE SHOWING REASONS FOR DISBELIEF.

(Based on 149 definite cases from boys and 85 from girls.)

Did not prove	{ Boys 109 = 73 per cent.
	{ Girls 59 = 70 "
Contrary to reason	{ Boys 36 = 24 "
	{ Girls 25 = 29 "
Miscellaneous reasons	{ Boys 4 = 3 "
	{ Girls 1 = 1 "

These figures certainly show, what we have already stated somewhat differently, that the child remembers concrete instances only, and judges accordingly. There can be no doubt that when he states that he believes in a superstition because it proved true in some way, as far as he can see, he is giving the final and most incontrovertible of all possible reasons. An interesting fact in connection with the disbelief is that while "Did not prove" is not given at all before the ninth year, from then on through the different ages, up to the seventeenth year, it appeals almost equally as a sound and excellent reason for disbelief to both sexes. The reasoning to explain doubt is almost always simple and crude, the very best reasoning found being in a ten-year-old boy's paper, in which he says, "I think signs are not true, because anything which has no life cannot connect us to anything." This is almost the only case found, where superstitions are spoken of as contrary to natural law, it being well worthy of notice that this is not mentioned even in the papers from sixteen and seventeen-year-old pupils.

In working with the boys' papers (which were collated after the girls'), "Proved true" was divided into "Proved for self" and "Proved for others." The latter was found to be given fifteen times,—twelve per cent. of all the cases. Although it is principally the *proving* that makes it appeal to children, yet, to some extent, this also belongs to "Some one told me," the reason based on authority. However, were it placed there, authority would still play a rather insignificant part, while the first-named division would continue to remain far more prominent than any of the others. The number also who believed in the superstitions because they "found something" were collated. There were nineteen who gave this as a special example of how it "proved true," or sixteen per cent. This reason played quite a prominent part in the pin-luck study.

Some of the excellent examples of which the papers are full may help impress outsiders with the sincerity and *naïveté* of the children's views. This delightful one, from a girl of ten, bears unquestionable internal evidence of truth: "I think it is true because once I was playing with the Wilson children after it and we were walking the fence, and I found five cents; and Emma felt very bad over it and I was very glad I found it too. That's why I think pin-luck is true." A boy of twelve tells us this piece of great good fortune: "I believe in finding clover. I know a German boy who found a five-leaf clover, and then found a nice big marble what he sold for five cents. These sentences are all true." Again writes a girl of ten, "If I pick up a pin, with the head toward me, I will have bad luck. Once I picked up a pin so, and I went to the Fair that day and it rained, and the rain spoiled my hat so that I could not wear it any more."

A most encouraging thing that goes along with this classification of true and untrue superstitions is the singularly open spirit of the child in regard to his luck signs. If he has proved the superstition to his satisfaction, well and good, he states it frankly. The same attitude is found when he has proved it false, or has not tried it at all. An eleven year old boy gives us all these cases. He says: "If you pick up a pin you will have good luck. I think this is true because I have tried it and have had good luck.

"If you say money three times while a meteor is falling, you will have good luck. I do not believe this is true because I have tried it and never had any good luck from that.

"If you pull a tooth and let a dog get it, you will have a dog tooth. I do not know whether this is true or not, because I have never let a dog get my teeth."

There are some children, however, who have not this open spirit, some who practice superstition as many practice religion, because there may possibly be something in it. Then boys seem occasionally a little more matter-of-fact in regard to their belief in luck, and in a few instances express a contempt not found in any of the girls' papers, as "Picking up a button is not true. My sister taught me that superstitious thing."

As a special study in throwing light on children's attitude toward their superstitions, the pupils of two schools were asked whether any superstitions in which they believed had ever failed them, and if so, how they accounted for the failure. Of the twenty-one answers received, the majority could "*in no way* account for the failure!" Several of the others said it had failed because they "did not do it right," or because something had been done to counteract it. A few had not had the absolute faith necessary, while but one,—a boy—suggests that a superstition in which he believed failed because "it was not true." All this emphasizes what has already been said about children's natural inclination towards superstitions, and their inability to do abstract reasoning. It is amusing to see in what a matter-of-fact way some of these failures are explained. "Once I looked at a star and wished on it," says a girl of twelve, "and then I looked at it again, and so my wish did not come true." Another sums up the whole matter with, "Many of the superstitions in which I have believed have failed, and still I believe in some that have failed again and again, but that once in a while have come true. I cannot account for their failing in hardly any cases." There is often a really pathetic strain in connection with the story of the failure, as in this from a boy of fourteen: "A clover leaf is good luck when you find one with six little leaves on it, but I never have any luck when I find one. I always take it and put it in my pocket, but I never have any luck." To merely tell children the superstitions in which they believe are not true, would certainly be of little avail. The question remains just what can be done, and how can we best do it.

Summary. To review: We have found that superstitions are individual affairs, even members of a family often having their distinct superstitions. A few superstitions, however, as horse-shoe and pin luck, appear almost universally known, and more or less practiced by all children. Knowledge of superstitions in general increases as children grow older. According to the classification of the lore given, California children do not seem much affected by the supernatural world, but rather by what is seemingly extraordinary in the natural; hence there is little faith here in spirits, fairies, ghosts, or goblins. Superstitious means by which the future is foretold are not generally practiced, children finding it easier to rely, for this knowledge, rather on the various events, accidents, etc., which are always occurring. In it, indications of approaching evil are especially prominent, which may show that superstitions hold their sway, partly because children live so largely in a state of fear. Next to the class of signs, in number of superstitions, comes that which includes all means by which children try to change, or bring about things, in the present or the future. The main thing desired seems general good for oneself, or the counteracting of possible evil. If we may judge by the superstitions of our school children, California boys and girls rarely care to bring misfortune on others. Closely related to this class of charms, or magic, is the one of superstitions based on the power in objects or actions. This is not so much a separate class as it is a part of all the other classes. Through it we come to the conclusion that children see life in a sort of indistinct way in certain inanimate things.

The study of these divisions, according to the ages of the pupils, shows that the superstitions of seven, eight, and nine-year-old children are more simple and general in character than the superstitions of older children. It is interesting, too, to note that no love-lore is mentioned at all by them, while superstitions which are produced by fear, or which produce fear, as of death or ghosts, play a very insignificant part. About the tenth year a seemingly sudden growth takes place, children not only expressing themselves more clearly, but also becoming more critical. This change from the earlier years is very marked in most of the figures and charts connected with this study. Considered educationally, this time may prove of quite as much importance as the age of adolescence.

Superstitions spread like other traditions, mainly through personal communication. The exact person, however, from whom any particular one is learned, is often forgotten. Among the different sources remembered, relatives and schoolmates rank first, while among the home relatives, the mother is more often credited with having given the information than is the father. In contrasting some of the superstitions learned at home and at school, superstitions are found to be acquired where the circumstances on which they were based are most apt to occur.

Children invent superstitions of their own, but do not place these with those that have come down to them as survivals. Both sets are largely based on ideal association, due to the child's ignorance of the mind as an entity. But besides this, superstitions appeal to children also, because of the rites and ceremonies connected with them. These are either simple and self-explanatory, adding force to the superstition, or complex and exciting, attracting as many plays attract.

Total disbelief in superstitions increases with the age. Generally, however, we find belief in some together with disbelief in others; for children do not generalize widely; each case is a separate case to them, to be solved on its own merits. The number of superstitions given as untrue, nevertheless, steadily increases with the age, which shows the growth of the critical spirit.

The final test to children of the truth or falsity of a superstition rests on experience. But, unfortunately, if it proves true after one trial, they are ready to accept it unquestioningly, and ignore afterwards all evidence to the contrary of their first conclusion. This reliance on a single proof continues through the seventeenth year. California boys and girls seem to know very little of natural law, and where they attempt any reasoning to explain doubt, it is always exceedingly crude.

The attitude of the child toward his luck beliefs is, as a rule, open and *naïvé*. He sees no reason why he should conceal them, and is quite willing to cite illustrations for or against any of them. The comparatively undeveloped stage of his mind is seen when he is asked to explain the failures of the superstitions in which he believes. He acknowledges the failures, but they are almost always mysterious and unaccountable to him. Whenever he does give reasons for them, they are like those of other untrained minds; the superstition

failed because he did not do it right, or because something happened to counteract the charm.

The differences that come out between the sexes are also of some value. Thus, girls are found to know more superstitions than boys, which may indicate that superstitions appeal more to the imagination of girls than to that of boys, but we must remember that mothers teach most superstitions. Boys, too, occasionally express a contempt for superstitions, which is rare among girls. The superstitions of boys and girls are distinct in character, which may be partly due to girls learning more superstitions from their sisters and mothers, boys from their brothers, and partly to the difference in the lives of each. In affairs of the heart, boys do not rely on love-lore; girls do. Boys have more faith in what pertains to the supernatural world, which may arise from their being out at night more than girls are.

Some Pedagogical Applications. There are some interesting pedagogical problems to be solved in connection with the question of how and when we can best help children realize the difference between the magical and the real. Neither children nor savages are always the happy careless beings that poets and idealists have loved to picture them. Both live much of the time in a state of dread of strange, arbitrary powers everywhere at work around them. The superstitions commonly learned intensify these fears. Now if we can replace this injurious lore by good, will we not have satisfied the natural craving of children to be related to the world about them in a way suited to their capacity, and at the same time have made a step towards solving our problem? For, if superstitions satisfy a genuine need, at least up to the tenth year, something equivalent to those signs most generally acquired, must be furnished to children. Is this not an argument for retaining Santa Claus and the fairies of good old times? And has this not some bearing also on the introduction of the study of myths into our primary grades?

After the tenth year there is no doubt that children have passed a decided stage in progress. They no longer accept everything unquestioningly. They are more critical and demand some form of proof. But they, and indeed even the oldest pupils of our grammar grades, show lack of ability to generalize, or to reason abstractly. They remember one or more concrete cases, and judge accordingly. And yet there can be no sound hope of bringing them to see the

absurdity of some of their views, until they not only go back to facts for proofs, but are able to generalize from them. Is not the tenth year, then, a good time to begin developing abstract reasoning? What studies will develop this best, and be at the same time best suited to the ages of the children?

One thing more of importance to pedagogy that comes out strikingly in the study, is the seeming ignorance of our school-children concerning natural causation. This seems hardly excusable in this so-called scientific age. If there ever was need of children's realizing and understanding, as far as they can understand, that nothing in the world happens arbitrarily or through mere chance, there is certainly a need of it now. They should begin to know, even in the primary grades, that the world is governed by law. Studies showing this, which demand careful experiment on their own part, since according to our study they have greatest faith in their own experiences, would be especially valuable in helping them to see this clearly, and in relating them sanely to the universe. But teachers must be especially careful to see that pupils understand and fully grasp the large bearings of the experiments.

Many studies might be based on this one, or made independently of it. The most valuable of these, and the best for comparison with savage superstitions, would be the study of the superstitions invented by the children themselves, although it would, no doubt, take considerable time to get a sufficient number of these on which to base conclusions. It might have some value, too, to compare the superstitions of children in various parts of the United States, and see the part that environment plays in making them more gloomy or more bright. The sources of superstitious lore would make still another study. I shall be glad to give any suggestions I can to any one interested in taking up one of these studies, or any other related line of work.

CLARA VOSTROVSKY,
San Jose, Cal.

STUDY IN REMINISCENCE

IV. CHILDREN'S COLLECTIONS.

EARL BARNES.

During a month of last year one hundred and twenty students discussed the early feelings and activities of childhood as seen in that most charming memoir, Pierre Loti's *Romance of a Child*.¹ From day to day they wrote out their own reminiscences along lines suggested by the text in the hope of quickening their sympathy and strengthening their understanding of childhood's hopes and fears and passions and dreams. The contagion of Pierre Loti's desire to simply express himself at times entered into the class, and then the papers formed a chapter in the natural history of the youthful human spirit, such as seldom comes under the red pencil of the instructor.

In one of his chapters Pierre Loti tells of the museum which he formed as a child, with its treasures from southern seas, and the dreams and ambitions that gathered around it. After reading this chapter the class wrote studies on their own early collections. The collecting instinct is a primitive one, and hence strong in children, but in some of its forms it remains with us and possibly develops with civilization. At least there is something in it that always clings to us and interests us.

The first thing that one notes in the study of the papers is the great variety of things that the students loved to gather and arrange and hoard when children. Twenty-eight say they have never cared to collect things, but this number must be discounted in the light of the fact that this was a class exercise, and there are always some students who find it easy to have nothing to report. I give the list of things collected by the other ninety-two with the number of times that each is mentioned, and also a list of the reasons assigned for making the collections:

¹ *The Romance of a Child*. By Pierre Loti. Translated by Mary L. Watkins. Chicago: Rand, McNally & Co., 1891.

THINGS COLLECTED.

Buttons, 19.
Picture cards, 19.
Minerals and stones, 13.
Stamps, 11.
Relics, 11.
Bits of silk or cloth, 10.
Coins, 7.
Flowers and leaves, 7.
Insects, 6.
Books, 6.
Dolls, 6.
Birds' eggs, 6.
Broken crockery or glass, 5.
Mementoes, 4.
Marbles, 4.
General collections, 3.
Birds, 2.
Poetry, 2.
Beads, 2.
Sticks, 1.
Colored paper, 1.
Useful bits of string and paper, 1.
Birds' nests, 1.
Autographs, 1.
Tobacco tags, 1.
Crochet patterns, 1.
Feathers, 1.
Names of tribes of Indians, 1.
Smooth pebbles and sticks representing horses, 1.
Round, smooth nuts, not good to eat, 1.

REASONS FOR COLLECTING.

Emulation, 22.
Pleasure of ownership, 16.
Imitation of others, 11.
Attraction of prettiness, 10.
Pleasure in arranging, 9.
Desire for large number, 9.
Oddities, 7.
Connection with outside world, 4.
Mother's admiration, 3.
Intrinsic value, 3.
Associations, 2.
Pleasure in collecting, 2.
Usefulness, 2.
Pleasure in exchanging, 1.
As trophies, 1.
For study, 2.
Largeness, 2.

This does not, of course, represent all the things collected by the class; it simply represents those things which stood out most vividly in the memory. All the collections except two represent series of some sort; in one case a boy collected nickels simply to get as many as possible without having much, if any, sense of money value in them, and in a second case, a boy collected several hundred smooth round nuts, not good to eat, simply for the pleasure of having them.

As one looks over the list he is impressed with the fact that nearly all the things collected are relatively indestructible; buttons, cards, stones, coins, and the like. At the same time, one notes that they are things for the most part having an agreeable form, com-

paratively small size, and in the great majority of cases, effective color. The elements in a collection that make it desirable to a child seem to be, variety, quantity, rarity, beauty, personal association or ownership.

The reasons given for collecting these things generally have reference to other people. Twenty-two speak of the spirit of emulation; eleven say they did it because it was the fashion; three mention the pleasure they had in having their mother, or some one else, admire their collection; four speak of the way in which the collection connected them with the outside world; one gathered and arranged paper strings and paper bags, not for his own use, but especially for others; and one speaks of the pleasure of exchanging.

Fewer children found the reason for collecting in the immediate effect upon themselves, independently of others; sixteen, however, speak of the pleasure of personal ownership; nine speak of their pleasure in classifying the things; nine wanted a large number; two say they loved to study the collections; two speak of the entertainment they found in going over the things; one found pleasure in dreaming about his specimens; and two speak of collecting things as trophies.

Still fewer papers speak of the pleasure as being connected with the things themselves, and in all these cases, of course, the pleasure is the reaction of the things upon the collector. Five say they were attracted by the strangeness of things, three say they cared for their value; three were attracted by size; six speak of color, and one of gilding.

When a succession of collections is mentioned, the movement begins with valueless colored objects, easy to get and to keep, where the principal incentive is emulation, either with one's self—to make the collection big, or with some one else—to make it bigger. This changes with advancing years to articles valuable in themselves, where the interest is more personal and self-centered.

Some one suggests that children who live much alone are more apt to collect than those who have playfellows, but this study is quite opposed to such a conclusion. Emulation or the desire to excel is the principal motive for collecting with children, though greed of possession comes in as a close second.¹

¹ See *Children's Collections*. By G. Stanley Hall. In *American Journal of Psychology*, January, 1890.

TWO LITTLE BOYS' STORIES.

VI. THE WRECK.

TOLD BY KNIGHT.

I.

There was once the ocean all covered with ice but the people went skating on it. Pretty soon they got scared because they saw an opening in the ice. That was where the Mississippi River came breaking down the rocks and that threw clods. They peeped in and they saw there an old boat that had been sunk and the boat was a warship so full of bomb-shells, bursting and bursting and scaring the fishes and everything. They looked in again and saw that it was one of their friend's boats.

II.

They sent for a diver to come out. He brought lots and lots of other men to come with him. Then the men looked and saw that horrible, horrible opening,—that the rocks moved together and clapped and the little fishes that got between them got clapped. The tides of the Mississippi River made that. There was a little piece of ice came down below. The tides of the river knocked against that and moved them back and forth. And the diver went down in the water and tied a pulley to the mast of the boat, and to every sort of stick sticking up. And then all the men came and grabbed hold of that rope, even the diver, and they pulled and pulled and pulled. And then that ship when they at last got it up, they found it all full of bomb shells and cannons and every sort of bursting thing.

Then they took the ship to land and when they had overturned it, they found a body hanging to the bottom of it of a whale which had been caught.

—*By a boy six years old.*

VII. THE EARTHQUAKE.

TOLD BY GEORGE.

"A great big earthquake came and blew up the world. A giant set it on fire. The earthquake blew up the giant too. And set all the houses on fire. And thunder and lightning came. And the world burst. Not anything else. It happened last November."

How does it happen that there is any world now?

"It began when the world was made. It burst before that (when the world was made) and the sky burst too. And then it made itself again and it burst again. It did the same thing that it did the other time."

Is it going to do that again?

"Next two hundred summers again."

Did your papa tell you this story?

"No, My papa tells me true stories when he tells me stories. This is just one I have made up." —*By a boy four years old.*

COMMENTS, SUGGESTIONS, AND QUESTIONS ON
STORIES VI AND VII.

The most striking thing about these two stories is the effort made by the boys to convey a striking impression. They have chosen the most gigantic and powerful objects, the forces of nature, space, and time for their material. The ocean, the earth, the Mississippi River, the war ship full of bombs and cannon, and a whale, furnish the material of the first; a giant, an earthquake, thunder and lightning, furnish forth the second. They then set all this material into the most violent commotion; the Mississippi River comes breaking down the rocks, throwing clods; the bomb-shells are bursting; the rocks move together; the earthquake blows up the world, the giant sets it on fire. To increase the effect they repeat their words; thus, in the first story the bomb-shells are bursting and bursting, the diver brings lots and lots of men, and the men pull and pull and pull. In the second story, the same attempt appears in a slightly different form. There the boy's imagination seems to have failed after the first effort, and so he seeks

to strengthen the terror of his story by repeating the event and prophesying its recurrence. The same effort appears in the "great big earthquake," and in the bursting of the sky, as well as the world.

The influence of environment is most striking in both these children; the first is the son of a biologist, the second of a geologist. They both hear talk about science, and it is interesting to see how they take hold of it and assimilate it. There is a swing and sweep to it that makes one feel that they care for large generalization, but the reckless tearing up of a universe, which makes itself again, with a Mississippi River running rampant through nature, knocking things to pieces, and bomb shells and earthquakes going off everywhere, makes one realize that their assimilation of it all reaches only to the plane of very primitive folk-lore, such as we find in the Zuni legends of creation. I should give these boys science drawn from works on folk-lore, selecting and arranging it so that the transition would be as easy as possible to the terms of Newton, Kepler, and Darwin.

DISCIPLINE.

IV. EXAMINATION OF THE EVIDENCE.

EARL BARNES.

It is best at the very beginning of such a study as this to look its difficulties fairly in the face, estimate their strength, and try to overcome them if possible. The difficulties here are of two kinds: First, the danger of harming the children; and second, the difficulty of getting true evidence.

The danger of harming the children through such a study is expressed in the following note handed to me in one of my recent institutes:

"I wish to be excused from asking children to write those punishment papers. Not from personal reasons. I have given no punishment worth noting as severe. But my predecessor did. So I hear. My reasons are:

"1. It brings up anew old frictions that should be forgotten.

"2. Some of these punishments would not be correctly told, even from the child's standpoint. For their ideas are totally colored by their mother's opinion of the matter, as she heard it. One of these mothers told me her boy was whipped severely for saying that ' $2 \times 2 = 4$.'

"3. The children are apt to think, from this request, that it is getting to be conceded that they ought not to be punished unless they want to be."

Of course, a teacher can harm a child by any kind of examination concerning his views, his desires or his feelings of dissatisfaction, but any sensible teacher who cannot give a composition lesson on just and unjust punishments, with no discussion preceding it or following it, without stirring up bitterness or trouble, is living in an unwholesome school atmosphere and had better change it. So far from causing trouble, I am confident such an exercise in the hands of a sensible teacher can be made a strong and tonic piece of work for both teacher and pupil.

The difficulty of evidence is much more serious and deserves our most careful consideration. How far do the papers collected represent the facts we wish to examine? It may be dangerous to present at the beginning of such a study the difficulties encountered in working over four thousand papers. I shall, however, do so at the risk of discouraging weak-hearted students.

The first difficulty is voiced by a boy of twelve, who says: "I don't care to tell family effers." This is doubtless a very real source of weakness in the evidence. Serious pieces of misdemeanor will seldom be described by the children in their compositions, and yet in four thousand papers I have found only three where this unwillingness to talk was obviously present. It undoubtedly keeps many cases from coming to light; but most children have some instances that they are quite willing to describe. Where children are unwilling to present their personal problems to teachers or parents, it reflects upon the fitness of the teacher or parent to have charge of children.

The second weakness in the evidence is due to the fact that the children think about their personal matters in vague ways. They rather feel justice or injustice than think it, and they seldom rise to the point of grasping a concrete situation as a whole. Real relations involving justice and injustice are generally made up of varied

elements, some right, some wrong. Further, each of the elements may be right from one point of view, wrong from another. The untrained mind tends to seize on one detail from some narrow point of view, demanding that it shall be righted; if they drop that particular detail it is only to seize upon another, treating it in the same way. It takes a highly developed, judicial mind to grasp all the details at once and determine on which side the balance of justice lies. Even then this does not give abstract justice, and the child is always struggling for an abstract or ideal justice.

Take for instance this paper written by a girl of thirteen in one of our Southern California counties:

I will be 13 years old. the second of June. Yes I have had an unjust punishment and I felt very bad about it once I had to stand up in the floor and I didnt think I ought to be punished because I didnt know my lesson at that time anyhow my lesson was in spelling to and it is what I never hardely miss to and I think the person who punished me had no right to do it anyhow it was onely by actend that I didnt no it eather and the person who punished me is alway cross to and after that I always knew my lesson to but I dont think I observed it them because the person only gave me ten minets to study in to, and I had a very long lesson to learn to and when I had examination I onely had three write and all the rest were wrong I onely got 4 per cent and besides I was very young to and the person made me stand up on the floor for two hours and then kept me in at noon to and after school an hour. and did not give me any dinner eather and I was so hungry that I mite eat my book and after that I studied my lesson at home but the person punished me was not kind at all I never missed my lesson after that and I guess I learned me lesson after that but I dont think I ought to be punished me anyhow I didnt cry about it like some of the other schoolers do and I spelled every one of my words well after that and when I got out of the old school house I went right strait home and told my parents and the said that I deserved it very well but I dont think I deserved it a tall one of the words was bassoon and their was another one and I forgot it but there was a lot of them in it and they were very hard to and I did not know what half of the ment and that is the reasin that I could not learn them I was onely nine years old at that time to and now I am 13 years old the person that punished me was a woman to and she didn like me atall and I didn like her neather I guess she is about twenty one now and I guess she is teaching school yet and she whiped me to but I didn observe it neather and if she punishes her scholers as much as she did me they wont have many scholers when I was goind to her she kept me in very near all the time because I didn know them but she gave me such long ones and so hard to.

The girl's judgment is lost in a torrent of felt injustice. The facts as she states them are these: She missed her lesson and, as a

punishment, had to stand on the floor for two hours, remain in at noon without dinner, and then had to stay in an hour after school. This is a clear statement, and may, or may not, be true; probably the time was less than she gives. But when we come to the reasons why the punishment was unjust, we have our real difficulty to meet. The girl says it was unjust because: she hardly ever missed her spelling; her missing was an accident; the teacher was always cross; she had but ten minutes to study; the lesson was too long; she was very young; the punishment was excessive; she didn't cry; the words were too hard; she did not know their meaning; and the teacher was a woman. All this tangled in with statements that it did her good, and that she always learned her lessons after that, illustrates, in an extreme type, the chaos of feeling and thinking in which children live in matters of discipline. We are dealing with a phenomenon which is a tangle, but this is all the more a reason for studying it. If this study brought us nothing more than a consciousness of the entangled state of mind in which children often live, it would still well repay the most careful study by parents and teachers.

The third question I would raise touches matter of fact. Do the children tell the truth? I believe they almost always try to do so. The things that interfere most with truth seem to be: Desire to get even with some past enemy—teacher, parent, or fellow-pupil, by overstating his share in the narrator's misfortunes; a desire to appear smart; or a feeling of shyness. Papers strongly defective in this way are, however, I am confident, very few. The falsehoods in the papers are generally errors of judgment as to time or circumstance, or they are excessive statements, born of feeling. Since our question is not, primarily, what punishments children receive, nor why they receive them, but how they feel about them, these errors in fact are not so serious as they might be.

A fourth serious defect in the evidence is due to the trouble the child finds in expression. The difficulties of writing and spelling and using words, stand greatly in the way of our getting at a child's real thought and feeling through his compositions. Even if the work could be done orally, the difficulty would not be overcome, for some children do not clearly understand the meaning even of such words as "punishment" and "just" and "unjust." Thus, punishment may mean any discomfort, any injury received from another, or retri-

bution, while just and unjust may be applied either to the punishment or to the misdemeanor. For instance, take the following utter misconception of "punishment" on the part of a boy of eight:

"My brouter fell down the steps and struck his foot on a nale the other day bad."

"One day Russll and I was slinging rocks at wagins and I slung a big rock and it slipt and struck Russll in the forehead and made a hole in his head and if you look at his head you will see it. I done it on acsdend and I did not mene to do it."

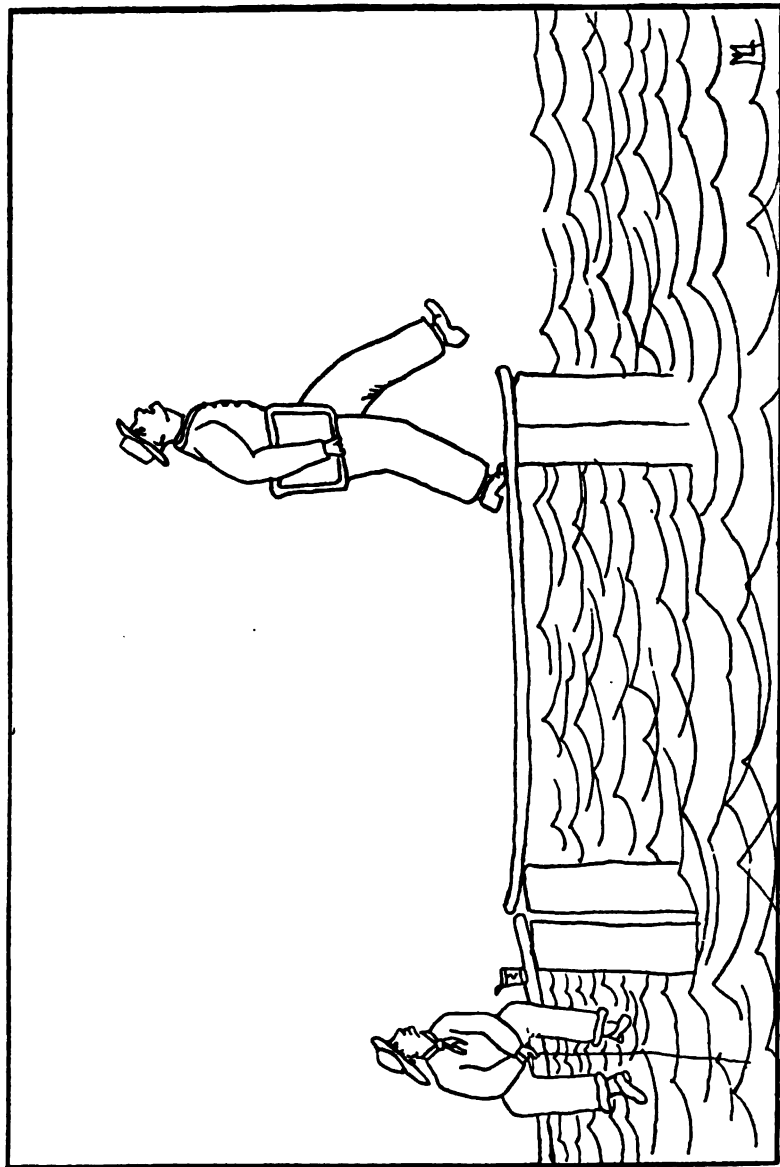
The following, from a boy of sixteen, illustrates his weak sense of "unjust," and its point of application:

"I thought I would be a man one day and started in to smoke a stump of a cigar, and the result was I was sick for three days. I was unjust because my folks forbid me to do it."

Papers where these words are obviously misunderstood are less than one-half of one per cent. of all the papers so far examined. Still the difficulties of expression are a very constant element of error in the evidence and hard to estimate.

These are the great difficulties we have to meet: The danger of harming pupils; the unwillingness of children to report their wrong-doings; the vague, unformed thinking of our witnesses; the danger that the children may be telling lies; the difficulties they have with details of expression. None of these difficulties are insurmountable, and they are not so prominent as they appear when massed together as they are here. They are the same problems we have to meet in all human testimony, and yet we must study humanity, and we can do so only through testimony. If you have worked over papers from the children under your charge, you will know that these weaknesses are obvious in very few of them. Nearly all the children take you frankly into their confidence, and let you see their own attitude as honestly and clearly as it exists in their own minds.

HANNS GUCK-IN-DIE-LUFT. II.



IV.

COMMENTARY ON THE PICTURE.

This picture is the third in a series representing the stages in children's pictorial development.

The picture of Bluebeard in the August number represents the lowest form of pictorial art, where the child makes a number of crude figures to stand for the disconnected details of the story. The pictures in the September number represent a higher stage, where the child tells the story in its regular order. Our picture this month, by a boy sixteen years old, represents a very advanced stage, where the child makes a picture to express the dominant feeling of a story. The boy had the same story of *Hans-Guck-in-die-Luft* that was used in the September study, but he ignored the various scenes described, even substituted a youth of his own age for Johnny, and created an environment which would express the dominant feeling of Look-in-the-airness and its perils. To make this one feeling as distinct and powerful as possible, Johnny is made the central figure, his head is tilted back, his mouth is open, and a vacant look rests on his face; his whole figure is ineffective and uncertain. The birds, the clouds, the sun, the fishes, are wisely omitted, that no attention may be withdrawn from Johnny's face. The danger is emphasized by having Johnny walking on a very narrow plank walk, insecurely fastened over water deep enough to carry considerable waves. The uplifted foot brings the whole picture to a climax, with the securely seated figure behind to emphasize it. This picture rises to the point of interpretation; it ceases to be mere representation and becomes, in a sense, art.

Is not this series representative of all forms of expression? In the first stage come fragments, sounds, words, spasmodic gestures, crude drawings of broken details, catch-words for the mind. In the second, comes an attempt to exactly reproduce, or represent in realistic description, by gestures that hop and run and wave with the incidents related, by pictures that reproduce all the details in their exact relations. In the third, we have an attempt to express the informing spirit, a gesture that expresses a state of mind, rather than the event described, a drawing that seizes on a particular feeling or sentiment, subordinates details, and speaks a universal language. If this progression be true, its application to education is not far to seek.

THE NEW ENGLAND PRIMER.*

AGNES SINCLAIR HOLBROOK.

The first definite attempt to develop a special instrument for teaching the young American to read bears no fixed date. As far back as 1691, the second edition of the New England Primer is announced in the year's almanac, with the history of John Rogers as a new attraction, and with a wood-cut of the martyr at the stake, surrounded by his wife, her nine small children and one at the breast, as a special feature irresistible to the infant mind. Whether because of this or other virtues, the Primer had, by 1720, gone through fifteen editions, and was enormously popular up to the close of the century. In 1777, an enlarged edition appeared, of which modern reprints are made with but slight variation. It announces itself to be "improved for the more easy-attaining the true reading of English;" and, further on, "to teach spelling," while certain parts are "to be learned by heart," and others designed "to nourish souls."

That this last object of spiritual nurture is paramount, appears even in the title of the book. Study of religious doctrine, rather than of the beginnings of language, was in the seventeenth century bound up with the very name *Primer*, first given to the *liber primarius* containing the offices of the Roman Catholic Church, because of its use at the first hour,—*prima hora*,—and, later, applied to a small book of prayers or pamphlet for elementary religious instruction. Then, too, the character of the subject-matter is theological throughout, five out of the twelve words of six syllables being *abomination, edification, humiliation, mortification, and purification*. The alphabet itself is sown into the young mind with Biblical characters, starting us at the beginning with Adam's fall, in which "we sinned all," and proceeding by way of young Obadiah, David, Josiah, who "all were pious," and the inevitable though profane

* *The New England Primer*. Reprinted by Joel Munsell's Sons. Albany, 1887, and *The New England Primer*, reprinted in Henry Barnard's *American Journal of Education*, Vol. xxx, p. 379.

Xerxes to "Zaccheus, He did climb the tree Our Lord to see." Are the Bible people put in to float the alphabet, or is the alphabet put in to float the Scriptural information? Perhaps both; but the latter aim certainly predominates. The very lists of proper names are made up of *Hepzibahs*, *Kezias*, *Noadiahs*, and *Uzzahs*. Prayers, maxims, quotations, and paraphrases of holy writ, the creed, the shorter catechism, hymns of Dr. Watts and other divines, exemplary dialogue, and a sort of dramatic poem recited by Youth, Christ, and the Devil, together with Roger's advice to his children, make up the literature. Perhaps this extract embodies its spirit:

"Good children must

Fear God all day,	Love Christ alway,
Parents obey,	In secret pray,
No false things say,	Mind little play,
By no sin stray,	Make no delay,
In doing good."	

From such material we judge the real aim of the classic is to teach the dogmas of the theology that passed current as Christian, to instil habits of obedience to authority, whether in the form of Divine Word or the commands of parents and teachers, and to give as much attention to English as was sufficient to this end. A few underlying streaks of prudent, worldly wisdom show here and there, as in the admonition,

"Seek first, & say, the living God,
And always Him adore,
And then be sure that He will bless
Your basket and your store."

But these serve rather as the relishes, the *hors d'oeuvre*, than the *pièce de résistance*, of the banquet.

The chief aim of the Primer being to teach,—not English, in any general sense,—but the theology of the day, how did it set about the task? It begins with letters, double letters, italic letters, italic double letters. It proceeds rigidly from *ab eb ib ob ub* to *za ze zi zo zu*. It leads us gently by the hand from *ape* and *apron* to *a-bo-mi-na-ble* and *a-bo-mi-na-ti-on*. It is orderly, reasonable, logical, synthetic. Not only does it develop from *a* to *z* and one to many syllables, but from little words to big, from short sentences to long, from youth to age. The alphabet of lessons is adapted to tender infants, such instruction as *Pray to God*, *Mind your books*,

Hate lies, Love your school, being given to juveniles, while the final warning is fitted to full-blown youth, of whom

"Many don't live out half their days,
For cleaving unto sinful ways."

We may summarize this method in the words *simple to complex*, if it be clearly pointed out that the unit of simplicity is a visible and not a thinkable unit. The letter, the syllable, the word, but never the thought, is the standard of measure. The assumption that *a* is simpler than *apron* is based upon forms, not ideas. As a conception, *apron* comes into a child's life before *a*. As a vital reality, *I am hungry* precedes *eb* or even *ab*. But the size of a thing and not its nature determines the classic sequence. Had the Primer taught natural science it would have gone from a mole-hill to a mountain, from a microbe to a whale, from a mustard-seed to a chrysanthemum show

If in the light of modern psychology we regard this adherence to form as a mistake, to what are we to attribute the fact of the extended and enduring influence of this book? The religious character of the teaching was a chief cause of the Primer's strong hold on a Puritanic public. Again, the element of variety, always so powerful an attraction to man, was here, perhaps, unconsciously employed, but to excellent advantage. We find poetry and prose, monologue and dialogue, illustration, rhythm and rhyme, appeal to the eye and ear, to the feeling and the intellect,—all of which shows that the book grew out of human needs after all, and gives it a real claim on our interest, even to-day. Then, too, the formality of method appealed to the later seventeenth and early eighteenth centuries in a way we can hardly comprehend. In England the triumph of form over matter was crystallizing the whole political, religious and social life into a second Augustan age, and the Puritans were not too far away in space or in spirit to feel the classic movement. The whole thought of the time was cast into a mold of which the Primer is the leading American type.

The philosophy of life held by the Puritans was perhaps at the bottom of their rigid artificial training. The doctrine of the Fall in its grimmest aspect ruled their acts and lives. In theology man was a fallen sinner, only to be redeemed by divine interposition, in pedagogy he was conceived as innately wrong, degenerate and per-

verted, only to be set right by means superimposed from without. In both fields natural modes of thought only existed to be overcome, natural tastes to be repressed, natural tendencies to be conquered. Whatever was hard to do was perforce desirable, and the value of a lesson was in direct proportion to the difficulties with which it was beset.

The ostensible aim of the Primer, then, was reading, but its underlying object, dogma. Its method was one of pure logic, taking cognizance only of forms, and set in opposition to all spontaneous tendencies. Its philosophy of life was a pessimistic one, the natural outgrowth of the doctrine of the Fall, in the light of which last fact the *what* the *how* and the *why* of the text show themselves to be organically related to each other.

An interesting reflection of the effect of the methods and aims of the New England Primer and its ilk is afforded by the diary of Anna Green Winslow,* a little Puritan of twelve, who wrote in 1770-71. That children were affected in both speech and thought by the severe theology and quaint formalism of the Puritan age we can hardly doubt. But that all were not transformed into such strangely old and eminently proper little people as Anna Green Winslow we can only hope.

This little journalist appears to divide her allegiance pretty evenly among church, society, and school interests. Epitomized sermons, all of the virtuous rather than the spiritual type, descriptions of tea-drinkings and gorgeous dress, in which "pompedore" shoes and top-heavy headgear are cardinal features, accounts of schools for needle-work, for "writeing," for "dansing, or danceing, I should say,"—these make up the main part of seventy-two pages. English is mentioned definitely but three times, and apologetically, as when Anna hopes "a little fals English will not spoil the whole for Mama." School in general is referred to six times, generally in the plural, as "my schools," sewing and dancing schools each twice, and writing school *seven* times. The prominence given to writing, or rather, penmanship, is further illustrated by the fact that, aside from school-work, the little girl refers to her own writing, and to copying done at home, six times, and exhibits a remarkably clear, even hand in the *fac simile* letter prefaced to the book; writing

* *Diary of Anna Green Winslow. A Boston School Girl of 1771.* Edited by Alice Morse Earle. Houghton, Mifflin & Co. New York, 1894.

seems, in fact, to have been the chief elegant accomplishment of the time, and in this, as in other studies, no deviation from the model was tolerated. Even filial love is expressed in terms of exactest nicety, exaggerated respect for Hon'd Papa and Hon'd Mama appearing in every sheet. One letter closes with an elaborate quotation, in which the spirit of the learned little Puritan is well reflected:

"Next unto *God*, dear Parents I address
 "Myself to you in humble Thankfulness,
 "For all your Care and Charge on me bestow'd;
 "The means of Learning unto me allow'd,
 "Go on I pray, and let me still pursue
 "Those Golden ARTS the Vulgar never knew."

Yr Dutifull Daughter

ANNA GREEN WINSLOW.

In fact, it seems impossible to get into the mind of the little girl and see how it works, so encased is every faculty in the mask of imitation, so walled about is every interest with the cant of the day. This little one gives utterance to such Calvinistic beliefs in such stilted phraseology that we are at a loss whether to regard her as a prodigy or as a parrot. A discussion upon "the doctrine of the Trinity, to prove the divinity of the Son and Holy Ghost, and their equality with the Father," or upon "the 7th question of the Catechism, viz.: what are the decrees of God?" sounds "prodigious." But the observation "Be not white sepulchres garnish'd without, but full of deformity within," has a parrotty ring, as, also, "My honor'd grandma departed this vale of tears $\frac{1}{4}$ before four o'clock Wednesday morning." Whether parrot or prodigy, the child is as effectually concealed in her inner processes by this dress of language as she is externally distorted by the enormous Hedderus roll of which she complains, that it makes her head "itch and ache like anything." Fashions in costume and expression co-operate to build up a lay figure in body and mind, and what the natural child may be is only a guess. No better illustration can be found of the fact that if we force our own notions on children, instead of developing theirs, they have their revenge in giving us again our phrases and mannerisms, behind which their real selves still lie hidden from our anxious scrutiny.

Studies in Education

v.



STUDIES IN EDUCATION

EDITED BY

EARL BARNES,

Professor of Education in Leland Stanford Junior University.

NOVEMBER, 1896.

	PAGE.
INTELLECTUAL HABITS OF CORNELL STUDENTS—Earl Barnes	163
CHILDREN'S PLAYS—Genevra Sisson	171
REMINISCENT STUDY: V. CHILDREN'S ATTITUDE TOWARD GHOSTS— Louise Maitland	175
GEORGE WASHINGTON AND THE CHERRY-TREE (Illustrated)	178
BIBLICAL STORIES	182
BIBLIOGRAPHY OF CHILDREN'S PLAYS—Genevra Sisson	184
DISCIPLINE: V. HOW TO WORK UP THE EVIDENCE—Earl Barnes .	190
THE TEACHING OF ENGLISH AFTER THE AMERICAN REVOLUTION— Agnes Sinclair Holbrook	194

VOL. I.
No. 5.

STANFORD UNIVERSITY.
1896.

\$1 a Year.
15 c. a Copy.

STUDIES IN EDUCATION.

These studies begin with July, 1896. They will be continued as a monthly publication for ten numbers, and will then stop. The last number will contain an index, and a full table of contents. The cost for the year is one dollar, or fifteen cents a number. Address all inquiries or subscriptions to

EARL BARNES,
Stanford University,
California.

Entered at the Post Office in Stanford University as Second-class Mail Matter.

INTELLECTUAL HABITS OF CORNELL STUDENTS.¹

EARL BARNES.

The term "Child-Study" is unfortunate in seeming to be limited to the period of infancy. The new movement felt all over our country to-day is much wider than this. It is nothing less than a direct, inductive, quantitative study of the natural history of human beings. It is true that college habits must be largely influenced by the program of work and the curriculum of study prevailing in any particular institution; but still it would seem that in our modern American universities, with the free intermingling of men and women and the development of independent choice through the multiplication of subjects of study and the extension of the elective system, we might find the phenomena of youth under as free an environment as can at present be found anywhere. The following study, made some eight years ago, is a very elementary attempt to approach this field of natural history in the university period.

However strongly we may believe in the sacred rights of individuality, and however little in the existence of the average man, still we must admit that, practically, most of our civil affairs are arranged to fit such a person. We may name him "the public," "Mrs. Grundy," or "my audience," but, in some way or other, the average man stands forth a real entity. Laws are made for him, goods are manufactured to suit his taste; newspapers, lectures, and books are written for him. So, in drawing up a course of study, or in assigning a lesson to a class, the instructor must assume that he knows how long it will take the average student to prepare lessons of different kinds, how many hours the average student can work in a day, at what time the average student is able to do his heaviest mental work,—in a word, what the mental possibilities of an average student are. Since, then, this average student not only exists, but is a more or less important personage in his influence on his fellows, it might seem worth while to try to determine his stature by some

¹ Reprinted, with some changes, from the *Cornell Magazine*, November, 1890.

means a little more exact than the system of guessing usually resorted to.

With a view to determining, in large outline, the mental habits at Cornell University, I drew up and circulated, in the winter of 1888, the following list of questions:—

1. Have you a regular plan of work for the whole or a part of the day? If so, please fill out this blank, stating hours for sleep, meals, exercise, recreation, study of mathematics, languages, science, etc., copying notes, general reading, laboratory work, lectures, recitations, etc. Give an average day. [Here a ruled blank was inserted, covering the hours of the day.]

2. In what two hours of the day can you do the best work on a difficult subject? What is your second choice?

3. Of the five morning hours, from 8 to 1, in which are you at your best, intellectually? Second best? Third? Fourth?

4. Is your power of doing mental work uniform from day to day? If not, can you give reasons for its variation, not dependent on physical health?

5. How long can you work continuously on mathematics before getting too tired to do good work? On language work? On laboratory work? On shop work? After an hour's rest, can you return to the same work with advantage? How can you get the most mental rest in an hour's time?

6. What work can you do best when you are mentally tired?

7. How much sleep do you need daily to keep in your best working condition?

8. What newspapers or magazines do you read regularly, if any?

9. What books have you read during the past six months, not demanded by your work?

Some of the blanks were filled out and returned, but, in the midst of other work, they were generally laid on the shelf and forgotten. Later, through the interest of Prof. J. G. Schurman, now President of Cornell University, another lot of blanks was distributed in his classes, 160 copies of which were returned. Of those who answered the questions, 24 were freshmen, 69 sophomores, 42 juniors, 25 seniors; 125 were men, and 35 were women. They were pretty evenly distributed among the different courses of arts, sciences, engineering, law, agriculture, etc.

In stating the results, I shall endeavor to generalize in regard to the following points:—the amount of mental work done; its distribution through the day; the amount, kind, and distribution of rest.

The questions were arranged so that the plan of work under (1)

should cover the same ground as some of the other questions, thus making it possible to check errors due to hasty and careless answers.

In answering (1), 144 students said they had a plan of work, and filled out the blank. Several, however, modified their affirmative by the statement that they had a plan for but part of the day, or that their plan varied from term to term. Sixteen declared they had no plan.

The following table indicates the amount of work done daily, counting study, recitations, lectures, and reading as work:—

HOURS OF WORK PER DAY.									
	6h.	7h.	8h.	9h.	10h.	11h.	12h.	13h.	No answer.
24 Freshmen . . .			1	2	4	8	5	2	2
69 Sophomores . .	2	7	10	25	10	9	2	4	10
42 Juniors 2	3	1	4	7	12	5	1	7	10.05
25 Seniors	1	2	8	4	4	3		3	9.77

The courses of study in the University demanded three hours per day of lecture or recitation work; three and three-fifths hours was the maximum amount allowed. Deducting three and a quarter hours as the average amount spent in the lecture-rooms, it would leave for outside study:—for freshmen, 7.65 hours; for sophomores, 6.75 hours; for juniors, 6.80 hours; for seniors, 6.52 hours. Since the junior and senior work was elective, and since the student in his third and fourth years can accomplish much more per hour than when he enters college, we might expect a greater reduction in time spent in study. The fact that the time varies so little would seem to indicate that seven hours is about the average outside study that the student can do; or else, that the elective work holds the student with the same tension as the required tasks.

To determine the exact amount of extra mental work done by the students would be a very difficult task. Religion, society, and the various associations make drafts on the student's time and mind which defy statistics. However, the outside reading is a more or less regular amount, and may serve as some index to outside activities. In answer to questions (8) and (9), 21 gave no report in regard to newspapers; 85 none in regard to magazines, and 24 none in regard to books. Of those who did report, the average freshman read 2.6 newspapers, 2 magazines, and 3.1 books; the sophomores, 3.2 newspapers, 1.9 magazines, and 4 books; the juniors, 3.6 newspapers, 2.3 magazines, and 4 books; while among the seniors the

average for newspapers was 3.7, for magazines 2.8, and for books 5.

These results seem to indicate a steady increase in outside reading during the four years of university work, with slight exceptions, under magazines in passing from the freshman to the sophomore year, and, in that case, the freshman returns are not full enough for a fair comparison. Where the newspapers are named, the *Cornell Sun* and *Cornell Era* are generally on the list. The next most common paper is the *Ithaca Journal*, while "a local paper from my home" comes in third; the fourth most commonly given is some New York daily. Among magazines, the *Century* was the most commonly mentioned, then the *Cornell Magazine*, then the *North American Review*, and, after that, *Harper's Magazine*, *The Popular Science Monthly*, and *Scribner's Magazine* were about equally popular. At least three-fourths of the books named were novels. Theological books came second, and the plays of Shakespeare third, with a sprinkling of poetry, science, agriculture, etc.

The distribution of work is estimated from the data contained in the plans under (1), and from the answers to (2), (3), (4), (5), and (6). Three gave five o'clock as their rising hour; 40 gave six; 98, seven; 2, eight; 1, nine; and 14 did not report. The morning session of the University closed at one, and the hours from eight to one were filled in the plans with every possible combination of recitations, lectures, and study hours. Only two of the students devoted any of those hours to recreation or exercise. Four dined at twelve; nearly all the others at one o'clock; only three dining at night. After dinner, many of the students credited the time, until three, to recreation or exercise. The time most commonly devoted to exercise is just before supper, from four to six, counting military drill as exercise. Forty-six students reported one hour per day for exercise; 37, two hours; 8, three hours; 2, four hours; 1, five hours; while 66 did not report any exercise.

Recreation is put down about equally for the time just after dinner, the time just before or after supper; while, in a few cases, it was taken just before retiring. In the plans of work, it is impossible to separate meals and recreation. For their meals and recreation, 3 reported two hours; 47, three hours; 55, four hours; 25, five hours; 13, six hours; 1, seven hours; and 16 did not report.

The remaining time of the day was devoted to study, as

follows:—14 studied one hour in the afternoon; 59, two hours in the afternoon; 51, three hours in the afternoon; 16, four hours in the afternoon; 2, one hour in the evening; 38, two hours in the evening; 82, three hours in the evening; 16 four hours in the evening; and 16 did not report.

Thus, the 144 students who reported studied altogether 349 hours each afternoon and 388 hours each evening; so there seemed to be practically little difference between afternoon and evening as to amount of work done.

The following sums up the answer to the question, "In what two hours of the day can you do the best work on a difficult subject?":—14 chose five to seven A.M.; 6, six to eight; 5, seven to nine; 25, eight to ten; 27, nine to eleven; 8, ten to twelve; 1, eleven A.M. to one P.M.; 0, twelve to two; 0, one to three; 0, two to four; 3, three to five; 2, four to six; 1, five to seven; 0, six to eight; 8, seven to nine; 21, eight to ten; 8, nine to eleven; 2, eleven P.M. to one A.M.; 13 did not indicate A.M. or P.M.; and 6 did not answer.

It is interesting to note here, that while but three students were in the habit of rising at five A.M., still fourteen regarded that early hour the choicest time in the day for study. Doubtless, all of them had tried it under the pressure of examination. Again, it may seem remarkable that, out of 160, but six should have found their best working time in the afternoon; but it must not be forgotten that they had all had five hours of work in the forenoon, followed by a hearty meal, and they seemed to need a long rest before reaching good working time in the afternoon.

For second choice, the students generally took a part of the day about twelve hours distant from their first choice.

The following table shows the choice of hours during the morning session of the University, from eight to one:—

	8 A.M.	9 A.M.	10 A.M.	11 A.M.	12 M.
Declared best hour by . . .	37	64	32	5	4
" second best hour by .	16	36	57	25	5
" third best hour by .	24	24	44	37	5
" fourth best hour by .	31	9	2	59	33
" poorest hour by . . .	27	4	2	10	95

The result may be summarized as follows:—In an eight o'clock recitation, about a fourth of the students are at their best, about a sixth are at their worst, while the remainder are in second- and

third-class condition; nine o'clock is the best hour of the morning, most of the students being then at their best, while a very small fraction are at their worst; at ten, most of the men are in second- or third-class condition; at eleven, there is a serious falling-off, hardly any of the students being at their best, while a large proportion are in fourth-class condition; and at twelve, almost every one is at his worst. Of the 37 students who selected eight as their best hour, 14 were men who rose at five or six, while 21 of them were men who retired at nine or ten; of the 41 who chose ten, eleven, or twelve, all but 14 put down eleven or twelve as their retiring hour.

In answer to question (4), 45 declared their power of work to be uniform from day to day; 109 said that it varied; and many tried to account for the variation. Three-quarters of the answers accounted for varying mental power by the weather—dry, clear days being uniformly approved, while dull, damp days were universally denounced. The state of feeling was the next most common cause adduced—mental excitement, anxiety, worry, and the “blues” being declared destructive to mental effort. Regular sleep and meals came next in the list of influences; while many students found the cause of their varying power in moral conditions, such as lack of interest, inspiring lectures, etc. Only three students spoke of their mental power being less at the end of the week than at the beginning; though many spoke of being less able to work immediately after a rest than when they were fairly at it.

In answer to question (5), 15 students said they could work continuously on mathematics one hour only before getting too tired to do good work; 53 could work two hours; 37, three hours; 12, four hours; 6, even longer; and 37 did not answer. On language work, 13 said one hour; 41, two hours; 58, three hours; 8, four hours; 6, five or six hours; and 34 did not answer. Only 55 of those reporting had laboratory work; of these, 7 could work only two hours continuously without getting too tired to do good work; 12, three hours; 16, four hours; 9, five hours; 5, six hours; and four could work even longer than this. Only 12 of the students were doing shop work; the hours which they reported were a trifle longer than those given by the laboratory students.

To the question whether, after an hour's rest, they could return to the same work with advantage, 29 answered no; 109 answered yes; and 22 gave no returns. To the accompanying question, as to the

way in which they could get the most rest in an hour's time, there was a great variety of answers: 38 declared for exercise in some form—gymnasium practice, ball, tennis, etc.; 31, for sleep; 23, for a walk; 6, for newspapers or some light reading; 4, for a bath; 3, for music; while the others would smoke, talk, etc.

The question as to the work that could be done best when mentally tired also drew out a great variety of answers. Thirty-five said they could spend such time to the best advantage in copying notes; 21 considered translation the best work at those times; 6 would read history; 5 would work in the laboratory; the others would do general reading, write letters, draw, practice on the piano, etc.

In reply to (7), 16 students declared that they needed but seven hours of sleep to keep at their best; 101, eight hours; 37, nine hours; 1, ten hours; 5 did not answer. The old adage, "Six hours' sleep for a man, seven for a woman, and eight for a fool," would seem to reflect badly on Cornell students, or else on the one who quotes the adage.

The results thus seem to show that in the amount of time per day which students can and do devote to work, there is considerable uniformity, the number of hours decreasing slowly as the course of study advances,—the average being 10.19 hours per day for the 144 students who reported. In the distribution of the work there is great diversity, the location of the best hours seeming to depend on the hours of retiring and rising,—the early afternoon hours, however, being uniformly poor hours for work. In regard to continuous application, there was also great irregularity, its possibility being less in mathematics than in languages; and considerably more in laboratory and shop work than in either mathematics or languages.

To sum up the whole study:—The average student at Cornell goes to bed at half-past ten, sleeps eight hours and a quarter, and gets up at a quarter before seven. He dresses, breakfasts, and begins work at eight. For the first hour, he is in doubtful condition for work; at nine, however, he is at his best; at ten, he is not in so good condition, though still good; at eleven, he is tired; and at twelve, he is in his worst working condition. Three hours and a quarter of the morning he spends in the lecture-room; the remaining time, he studies or reads. At one, he goes home and dines; after dinner, he takes some exercise or has some fun for an hour or two, then works,

though he is in inferior condition for it. At five, he stops work, and, after an hour of exercise or play, he has his supper. About seven, he goes to work, reaches his best condition at eight; from nine on, he is not at his best; and at half-past ten, he goes to bed again. During the day, he has glanced over a couple of papers, read part of a magazine, and a chapter or two of some book outside of his work. The day has also been brightened by work or play in some of the numerous fraternities, athletic associations, Christian organizations, etc.

This is the sort of day the instructor must count on in assigning work, or in making programs. From this study, he might infer that among students situated like these, about six hours and three-quarters can be counted on for outside work, the hours becoming less as the student goes on. He might also infer that the hours devoted to work do not become very much less under an elective system than under a system of required work, the slight difference being made up by increased outside reading.

It also seems clear that in a session of five consecutive hours the heaviest subjects should be given at nine or ten o'clock,—not at eight, if avoidable, seldom at eleven, and never at twelve.

It would also seem that the instructor should make a large allowance, in estimating recitations, for the weather, and for varying personal condition. He should not expect as good work on Monday as on the other days of the week, nor should he hold the students responsible for good results just after vacation.

The best argument for a single long session in the school day is that it leaves the afternoon unbroken. This study seems to show that the long session leaves the afternoon a period of partial exhaustion. Is this any better?

This study would seem to say to the student that he has only a fixed amount of vital energy to expend. If he uses it at night, he has not got it in the morning; if he uses it in the daytime, he has not got it at night. It should excuse him from being ashamed of needing eight hours of sleep daily, and it would seem to say that after dinner, and just before and after supper, is the best time for recreation and social affairs — at least, at Cornell.

CHILDREN'S PLAYS.¹

GENEVRA SISSON.

This study was made on twenty-nine children composing the kindergarten in the city of Santa Cruz. The kindergarten is there a part of the public-school system, so that all classes of children were represented. Only children between the ages of five and six had been admitted to the kindergarten, so that there was a great uniformity in the matter of age.

The kindergarten was organized the last week in July, and for the first week or so the children were too timid or too conscious to indulge in many plays. From the very first they had one common attraction, and that was a large sand-pile in the back of the playground. For about two weeks almost all their interest centered around this sand-pile, but gradually, as they became acquainted with each other, new interests arose.

Systematic observations, beginning October 24th and continuing till December 12th, were made upon the free play of the children before school, at recess, and at noon each day. During this time no suggestions were made, and the play was not interfered with unless it became dangerous. When the systematic record was begun, the children had already divided themselves into four distinct groups, though sometimes a play of more than usual interest would unite them all.

The first group consisted of the older and more active boys. Their plays required much action; they ran, they wrestled, they climbed with all the might that was in them. They played a great many highly imaginative games, some of them rather rough and boisterous. During the time that I observed them, not quite two months, I noticed thirty-one distinct kinds of spontaneous, dramatic plays, in which almost all this class of children were engaged; for instance, policeman, hunter, store, electric-light men, etc. Alfred was decidedly the leader of this group. He is very bright, has quick perceptions, a good memory, and an exceedingly vivid imag-

¹ Reprinted, with slight changes, from *The Pacific Educational Journal*, June, 1894.

ination. He often tells imaginative lies. He is affectionate, but very impulsive. He often does things out of place one minute, but by the next penitential tears are rolling down his cheeks.

The next group consisted of older girls, and some of the little ones whom they drew in to play minor parts. Their games were almost entirely dramatic, and consisted usually either of playing house or playing school. These plays were generally conducted very quietly, out on the sand-pile at first, where they built the houses, gardens, etc., and then, when it became rainy, in the hat-room or in the woodshed. The leadership of this group was divided between Jennie and Rose. Neither of them are especially imaginative, but both have strong domestic, motherly traits. Jennie is very loving, Rose rather imperious. Their motherly instincts were greatly developed by the fact that they adopted two little Swiss children who could not speak English.

The third group was made up of the smaller children, and one of the older but more bashful girls. They generally indulged in simple representative games, but spent a large portion of their time running from one part of the yard to another because of some passing whim,—over to the faucet to get a drink, or over to the sand-pile to see what the others were doing. The leader was Dan. He was slightly younger than the others, but remarkable for the great amount of will-power he possessed.

The last group was a miscellaneous remainder, made up of two or three who did not have any special interest in life, or were too timid to show it. They had no leader, for they were not organized. They were not sick, but listless. The chief attraction to this group was the swing. They very seldom ran, or exerted themselves otherwise.

The duration of a game varied greatly; sometimes it would last but a minute or two. Once such play as the "Wild Hog" occupied the attention of the larger boys for two days and a half. Again they had a slanting beam, on which the boys played nearly the whole time for over a week. One boy pounded a bolt steadily for twenty minutes; he played that he was mending a car, and said that he was playing that the bolt was a screw, that he needed a screw-driver, but as he had only a hammer, he should have to pound with it. He stopped only when the bell rang.

An important point to notice is the reappearance of the same

play on consecutive days. The swing has been in use all the time, with trifling interruptions, from the time it was put up in September. They slid and performed on the beam, one end of which was on the fence and the other on the ground, every day for a month; but at the end of that time it was accidentally thrown down, and they did not ask that it be replaced. Hunting, either wild hogs or other animals, appeared thirteen times during about thirty-five days. Tops were on hand every day from October 26th till about the 1st of December. There were but three or four days during the last two months of the term that the girls did not play either house or school.

The following list of plays of the larger boys will show the order in which these plays occurred, and the frequency with which they took place:—October 24th, Policeman; 25th, Policeman and Hunters; 26th, Wild Horses, Hunters, and Salvation Army; 30th, Butcher and House; November 1st, Butcher, Jail; 2d, Hunting, Cars, Circus; 3rd, Butcher, Band, Procession; 6th, Band, Ladder, Steamer, and Circus; 7th, Ladder, played with as Steam-engine, and Circus-train; 8th, Ladder, played with as Pipe-organ, and then Wood-saw; 10th, Ladder, as a Steamer; 13th, Dragon; 14th, Wild Pig; 15th, Wild Hog; 16th, Wild Hog, Train, Indians; 17th, Wild Hog, Indians; 20th, Merry-go-round; 21st, Cars; 22d, Circus and Menagerie; 23d, Policeman; 24th, Cars; 28th, Horse; December 5th, Electric Light Men, Noah's Ark; 6th, Electric Light Men, Circus; 7th, Wild Horse, Bear, Robbers and Policeman, Electric Launch, Steamer and Boats, Indians; 8th, Indians; 11th, Santa Claus, Wild Horse, Store, Street-watering Cars; 12th, Teams of Horses, Telephone.

The general quality in the plays that attracted and held the children was action, found either in purely physical plays or dramatic plays in which all could take a part. And, in their representative plays, those that dealt with natural objects and animals had a greater holding power than those which dealt with artificial things.

As you will have noticed, the traditional games, such as "London Bridge" and "Prisoner's Base," played but little part in the amusements of the kindergarten children. Out of doors, the game of "Hide and Seek" was the only organized traditional play that was suggested by the children. Near the beginning of the term, I showed them how to play "Drop the Handkerchief." They enjoyed it then, but did not call for it themselves. Sometimes their

dramatic play came to have a set form ; but that set form was always at the mercy of the leader, who varied it to suit himself.

Their plays during the first days of the kindergarten showed evidences of both physical and dramatic instincts, but during the first few weeks the purely physical plays largely predominated. However, their imagination seemed to develop rapidly; and in the case of the more timid ones they also gained so much in self-possession that they were no longer afraid to show forth what was in them.

Though the children are still very imitative, they seem to have developed a good deal of originality and independence. For instance, when they were standing on the ring in the kindergarten ready for their games, I asked the musician to play an unfamiliar tune, and told the children to do anything they liked as long as the music continued. These are the answers the children gave me as to what they did the last time we tried this:—"Hopped," "crawled as a horse," "elephant," "grasshopper," "black-legged man," "bird," "scarecrow," "bear," "river," "sand-bug," "wheel." You will notice that but two played the same thing. You will notice that but one confined himself to the purely physical desire for motion, all the others being representative. It should, however, be stated that only the older children were present when this observation was made.

The plays seemed to come from two entirely different sources. The first was the compelling power of the leader. A child obliged the other boys, by means of his personal influence, to make the ladder a wood-saw, when they wanted it to be a steamer. He could almost always draw the boys of his group into the play he wanted. Second, the special novelty or interest of the play itself led to its choice, even when not forced upon the attention of the school by an aggressive child. Thus, the boys were greatly delighted with the idea of becoming acrobats, and, without any incentive but the pleasure of the act itself, each boy tried for days to equal the feats of Lewis, a quiet, non-aggressive boy.

Both these classes of plays were suggested by the environment of the children. Every public event which they saw in the world around them, or heard talked about by grown people, was mirrored in their play. But whatever they did, or from whatever reason they did it, their whole hearts went into their play. It was an expression of the children themselves, and a truer one than any set exercise or experiment could give.

STUDY IN REMINISCENCE.

V. CHILDREN'S ATTITUDE TOWARD GHOSTS.

LOUISE MAITLAND.

Reminiscent papers handed in by 171 university students of pedagogical psychology have been used as a basis for this study. The subject dealt with in these papers does not admit of clear definition, nor do we find it as we read. On the contrary, the memories of ghosts are generally vague; the experiences were unanalyzed when they occurred, and the memories are difficult of analysis now.

The aim of this study is:—To discover how far children believe in ghosts; to find if children fear ghosts, and, if so, if this fear plays any conspicuous part in their lives; and to see if any remedy is suggested by these papers, providing an evil exists.

The following table gives the results of the study in outline:—

Number of papers	171
Number of statements collated	795

I.—Attitude of Writer, 164.

1. Formal statements concerning belief		122
Disbelieved	41	Believed, but questioned 9
Believed	35	Disbelieved, but questioned 9
Believed something else	21	Disbelieved, but feared 7
2. Formal statements concerning remembrance		25
No remembrance	17	Vague remembrance 8
3. Formal statements concerning importance		17
Not important in childhood	15	Important in childhood 2

II.—Personal Reaction Aroused, 95.

Was afraid	42	Was not afraid	5
Fascinated	17	Was afraid to tell	3
Feared something else	13	Enjoyed	2
Fear lingered	11	Wanted to run away	2

III.—Sources of Information, 110.

1. Social, 77—		2. Solitary, 33—	
Children	26	Stories read	22
Stories told	24	Pictures	9
Servants	18	Imagination	2
School	4		
Games	3		
Parents	2		

IV.—Educational Influences Exerted, 43.

1. Disbelief taught, 41—	2. Belief taught, 2—
Parents 21	Parents 2
Miscellaneous 18	
Teacher 2	

V.—Age, 44.

1. Definite statements, 18.	2. Indefinite statements, 26.
-----------------------------	-------------------------------

VI.—Conception of Ghosts, 339.

1. Appearance of, 158—	Cause fright 20
Clothed in white 50	Glide swiftly 15
Like human figure 19	Appear and disappear 9
Shadowy 17	Do all sorts of mysterious
Like dead persons 14	things 5
With long arms or hands . . . 11	Foretell death 4
Like skeletons 8	Injure 3
Vague 7	3. Time of appearance, 55—
With sepulchral voice 6	In the dark, and when alone 36
Without substance 5	Night 14
Luminous 5	Twilight 5
Black 4	4. Places where they may be ex-
Like animals 4	pected, 44—
Like fairies or spirits 4	Graveyards 19
With lurid, hollow eyes . . . 4	Lonely places 9
2. Power of Ghosts, 82—	Bedrooms and attics 8
Catch, chase 26	Haunted house 8

It does not seem possible to attach any real importance to the formal statements of the writers as to their belief or disbelief in ghosts as children,—they are hedged or fenced in with many qualifications and half-disavowals. Probably, in this case, as in the former direct study on children (p. 51), the bias towards intellectual respectability leads in some instances to an avowed disbelief, while in others the state described as disbelief was really accompanied by vivid sensations of fear.

The more or less vivid descriptions of fear in ninety-three cases seem to be one of the most important features of this study. In the direct study on the children's papers (p. 51), very little mention was made of this; but the desire to run away was very marked. In this case, the fear has been well remembered by the grown-up people, while the desire for some sort of action figures in only two cases. The present writers evidently do not mind telling of their

fear as children, while the children themselves do not so often mention it. This is just what might have been expected; but the value of such studies as these is great if it lifts for a moment, with any degree of certainty, the veil that is drawn so closely around this area in the lives of our little ones. In a study on Fear, by Miss Holbrook (p. 20), the "vagueness of the intellectualized aspect of the subject and intensity of the sensuous side" is clearly demonstrated.

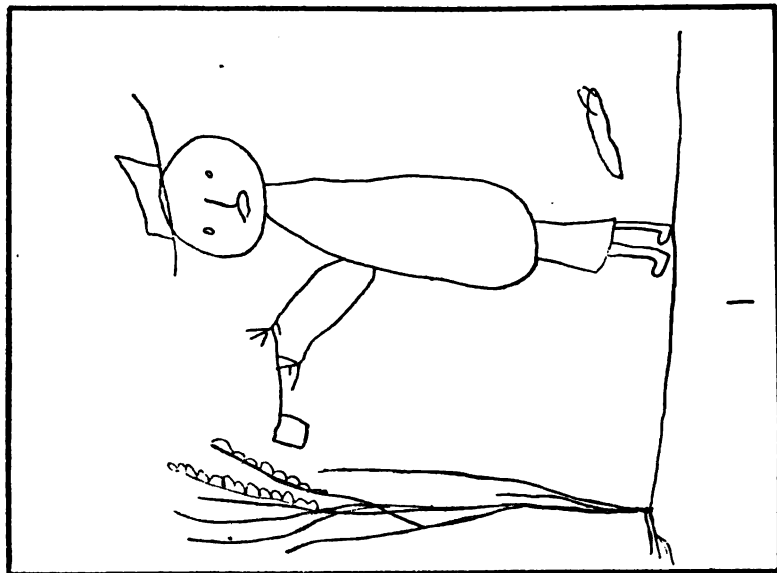
The sources of information remembered are interesting in themselves, and incidentally throw light on what was somewhat puzzling in the direct study on children,—the frequent mention of home as the place where ghosts had been first heard of. Home here resolves itself into brothers and sisters, servants, stories told and stories read. School figures only four times in formal statement, but may fill a larger *rôle* in the minds of the seventeen children who learned the superstition after they were old enough, in their own opinion, to know the truth.

To sum up, in reply to the question, Is there a stage in the development of children when they are prone to believe in and be frightened by debasing superstitions? we find, if we are justified in attaching any weight to the papers discussed:—

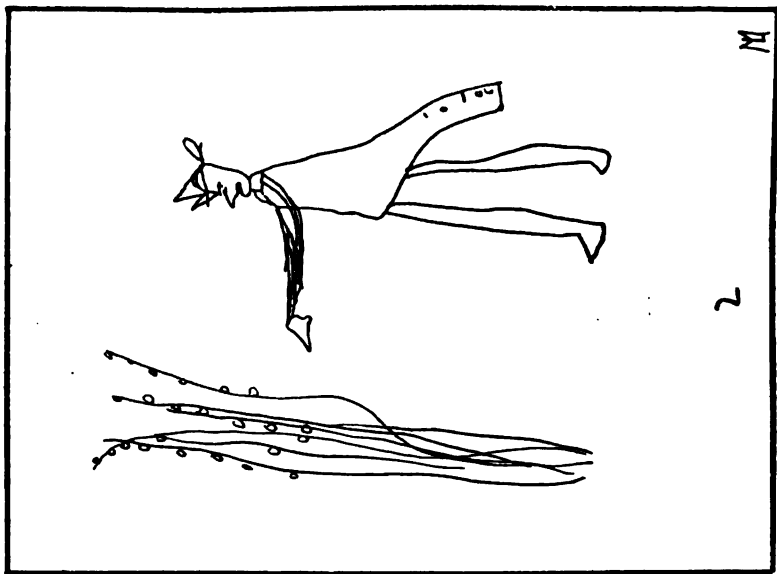
First, that such a stage is clearly suggested; for while 58 did not believe or remember, 56 believed in ghosts or something similar, and 33 are doubtful as to what they did believe.

Of the 171 writers, 34 per cent. presumably had no fear, since they either disbelieved in ghosts or had no fear of them. Of the 66 per cent. remaining, 60 per cent. mention fear, showing that fear almost universally accompanies the belief in ghosts.

One remedy is distinctly pointed out by the 41 writers who say that disbelief was taught to them. A study of the sources of information affords us another hint. Since we cannot altogether prevent our children from hearing these superstitions from people who more or less believe in them, it would be a wise precaution to let them hear the truth at the same time. But, more important perhaps than this, is the suggestion contained in that part of these papers concerning a belief in other spirits, viz: that we may substitute harmless or even ennobling fancies in place of the baser sort.



1

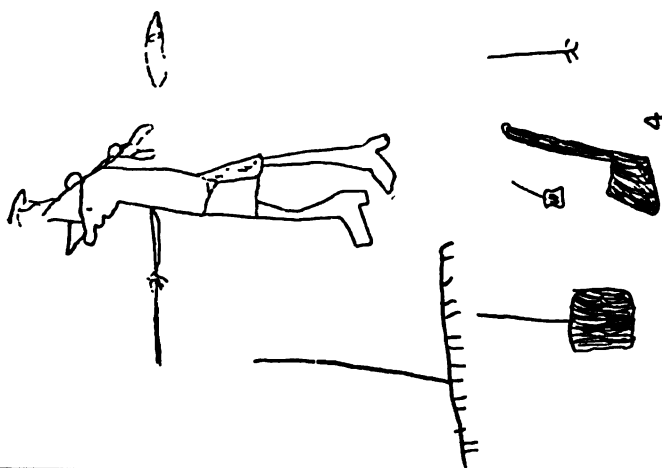


2

M



3



4

GEORGE WASHINGTON AND THE CHERRY TREE.

COMMENTARY ON THE PICTURES.

These four pictures were drawn by children in the first year of their school life. Before Washington's Birthday they were told stories about Washington, and had a picture of him hanging on the wall of the school room. This picture represented Washington in adult life, wearing a three-cornered hat, and a long military coat, with buttons on the tails, with his hair done up in a queue, and a sword in his hand. One day the children were told the story of the cherry-tree, and asked to draw a picture from the story. These four pictures were among those produced.

Do not the pictures illustrate the way in which a child pieces all the fragments of his knowledge together in making up what to us seem very simple concepts? In No. 2, the child takes George Washington directly from the picture on the wall, cocked hat, long-tailed coat, military attitude, and all. He places this figure before the cherry-tree, substituting a hatchet for the sword, and the picture is complete. The child never grasps the absurdity of the combination; for he does not take the whole thing into consciousness at once as we should do.

In Fig. 3, the child produces the youthful George; but the three-cornered hat is too picturesque a detail to be omitted, so that is brought from the picture on the wall, together with the sword, and given to the boy George. The sword, however, when drawn, proved unsatisfactory,—and the child said there was not room to draw a good one; so he went over to the right and drew a sword to suit his fancy. Probably the child had never seen a sword; but it was to cut—so he put teeth on it. Does that mean that he built up the concept from a saw?

In Fig. 4, the child draws the George Washington of the picture,—hat, coat, queue, sword, and all. Here, too, the sword is unsatisfactory, and is repeated on the right. Then the hatchet is drawn down below, and evidently it suggests a general supply of garden tools. Here the materials are drawn from the picture on the wall, from the story of the cherry-tree, and from experience,—but the elements are not blended in any way.

In Fig. 1, the child has drawn a young George, even putting him in skirts; he has given him a hatchet, and placed him in front of the cherry-tree — which bears cherries. So far the materials are all drawn from the story as they should have been; but, at the last, the sword, from the picture on the wall, is introduced at the right.

If this analysis of the pictures is correct, then we see how the most heterogeneous elements are combined in forming concepts under our direction. Is it not much the same with us when we rise to higher planes? Take, for instance, our conception of an angel: is it not pieced together from just such odds and ends as these? If this analysis is right, it follows, then, that in education we need to consider not only the fragments that we insert into children's minds, but the blended whole that they piece together.

Much of our work is like that in one of our normal schools, where a lesson was given on mountains. To make sure that there should be no mistake in building up the idea, the teacher took in some shingles and sand, and constructed a mountain as she taught. The result seemed very satisfactory, until one small boy, at the end of the lesson, demanded, "Miss Brown, be's they made of boards?" Undoubtedly, the nebular hypothesis can be taught to a class of primary children with the aid of a baked apple and other simple apparatus, — but what is the blended whole that stands in the children's minds at the close?

Meantime, we must remember that this may not be a true analysis of the way the children drew these pictures. Drawing is slow work, compared with thinking, and the elements in each picture may represent fragments caught and pictured in associated chains of thinking. Again, they may be due in part to the fact that the child uses figures as hieroglyphics, and he is simply writing down a skeleton of the story.

BIBLICAL STORIES.

VIII.—THE CHILDHOOD OF MOSES.

AS TOLD BY A LONDON SCHOOL-BOY.

Now little boy Moses had a sister about sixteen, and a father and mother which was Jews. And Moseses mother couldnt abare to drownd he little boy, so she made a cradle same as they used to make arks. Then she put her little baby in this here cradle, and carried it to the river, and put it on the water amongst some bullrushes so as it couldnt float down. And who do you think as it was that used to sit on the grass all day long watching as it didnt get loose? It was that there sister Mirium what I said he had. She was a very good young woman and did not mind the cold grass, because she knew as she was in the right, and that the King would be perhaps slain.

This wicked King had a daughter, as you would think she was. She used to go out bathing same as boys, only she didnt swim. She only just went in up to about her knees, and then used to put the water over her head down her body, and then used to tell the other women and her father as she had been in. The women could not see how far she had been in, because of the bullrushes which you have seen on the wall.

One morning she got undresst where Mirium was sitting on the grass, and she walked straight in up to her knees, to where the cradle was. When she saw him, she took him up in her arms, and run back to the bank shouting out as she had found a baby while she was swimming. The women all came round, and Mirium edged in among them. The lady was so well pleased as she had got a baby, that she didnt get dresst till she had settled things. But it was not hers, because it was not brought. Only found.

And Mirium said, "Pharoh's daughter, shall I go and find a nurse for you?" and if the lady didnt go and say yes straight off. Then Mirium run away fast as you, and who do you think she fetched for a nurse? Moseses mother, as had had him brought to her.

And Pharoh's daughter said unto her, "I will actshully give you wages for nursing this baby." And so Moseses mother nursed her own little baby without laughing, fear she should be found out and not get good wages.

IX.—THE PARABLE OF THE LABOURERS IN THE VINEYARD.

A London boy's reproduction of this parable ends as follows:

Then he lifted up his hands and started of them, saying, "O men, did you not go and say as you would gether me grapes all day for one penny. Didnt you?" And the wicked men then see as the old Jew had them, and they cried and said, "Behold yes." But the old gentleman kept it on, and shouted, "Sharnt I do what I like with my own money, idlers? Sharnt I?" And the wickid men came to pass, and said, "O yes, sir," for they was getting a bit frightened. Then the old man got savijer unto them, and he shouted, "Then, behold, all of ye go out of my vineyard quick, and mind, the first of you shall be last, and the last ones first. So out you go sharp." And they went right away with their pennies.¹

COMMENTS, SUGGESTIONS, AND QUESTIONS ON
STORIES VIII AND IX.

These stories, reproduced by English school-boys, illustrate the same points that are made by the pictures on pages 178 and 179. The children have taken the scriptural incidents and phrases, added their own experiences and observations, and given us a patch-work which is good in its elements, but absurd in its blending. It is very easy to pick out the elements and trace their origin. "The bullrushes which you have seen on the wall" comes from a picture; and "the king's daughter going in bathing" same as boys probably comes also from an English sunday-school picture;—the setting, however, comes from real experience. "The cold grass" is a delicious transference of English sod to the banks of the Nile. The last paragraph of the first story is right out of the boy's own life; so, too, "Mirium edjed in among them" "till she had settled things." The mixture of scriptural and cockney phrases is like the mixing of swords, saws, and hatchets in the pictures.

¹ From *Curiosities of School-boy Wit*. By Henry J. Barker. Longman's Magazine. March, 1890.

BIBLIOGRAPHY OF CHILDREN'S PLAYS.

GENEVRA SISSON.

The best and most complete reading tests on children's plays are those found referred to below in the article by Geo. E. Johnson and in the books of Alice Gomme and William Newell. In this list we have given references only to books and articles printed in English, and generally accessible.

The play instinct in children takes as many varied forms as life itself. So, also, when we come to consider the literature bearing on the subject, we see that the problem has been taken up from many different points of view. We find in the literature of play two distinct methods of approaching the subject,—by philosophy and by description.

One class of writers have simply philosophized about play. They have discussed such questions as the origin of the play instinct, the relative value of free and directed play, and whether games have arisen by evolution or invention. The chapter on play in Susan E. Blow's *Symbolic Education* is a good example.

Another group has gone to work to make careful observations of the actual facts regarding the plays of children. These articles have little or no theorizing about them. They simply state scientific facts, and are suggestive, because of the fundamental questions which they raise.

Any available classification of these descriptive articles on play is unsatisfactory, but the titles naturally fall into some rather ill-defined groups. One group of articles deals almost altogether with the spontaneous plays of children. By spontaneous plays we mean any self-imposed activity of childhood originating with the child himself or his companions; any play that does not have a set form, but is varied from hour to hour. The *Story of a Sand-pile*, by G. Stanley Hall, makes a good illustration of this class.

Traditional games, or plays handed down from one child to another, have a large place in the life of children. These games have a set, conventionalized form that varies little from century to

century and country to country. Numerous articles and books have been written upon them. A good type of this class is W. W. Newell's *Games and Songs of American Children*.

Certain games have become very highly specialized to-day. For instance, football, from the original crude form, has been developed into an extremely elaborate and complicated game. There are a number of books, each devoted solely to the exposition of one of these complex games. The *Badminton Library* is composed of just such volumes.

The *Reports of the Ethnological Bureau*, edited by J. W. Powell, furnish us with a wealth of material regarding the amusements of uncivilized people. Most of these deal with the sports of adults, but they have a double value from their bearing on the hypothesis that the child in his development mirrors the development of the race.

Many other lines might be traced out, all bearing on the literature of the play instinct. For example, we might consider the publications advertising manufactured games, such as Lotti and Parchesi. We might study the history of great festivals, carnivals, and holidays. But in the bibliography given below we shall take up only two more groups, viz: the reading lists already available, and the syllabi issued with a view to the gathering of data regarding the play instinct.

Badminton Library. London: Longmans, Green & Co. 1889-1890. Each book about 400 pp.

Collection of books written by English authorities on each of the following subjects:—Cycling, Golf, Fencing, Boxing, Athletics, Football, Hunting, Racing, Riding, Polo, Fishing, Cricket, Boating, Driving, Shooting, Tennis.

Blow, Susan E. *Symbolic Education*. International Education Series. New York: D. Appleton & Co. 1894. pp. xviii+251.

A chapter on the *Meaning of Play*. An effort to fathom the origin of the play instinct, pp. 111-146.

Burnett, Frances Hodgson. *The One I Knew the Best of All*. New York: Chas. Scribner's Sons. 1893. pp. viii+325.

Contains numerous allusions to dramatic plays.

Camp, Walter. *Foot-ball Facts and Figures*. New York: Harper & Brothers. 1894. pp. viii+237.

A symposium of expert opinions on the place of foot-ball in American athletics.

Clark, S. H. *Expression in Child Games*. In *Kindergarten Magazine*, March, 1895. Chicago: Kindergarten Literature Co. pp. 479-484.

Plea that the child be allowed to express his own individuality in the playing of the kindergarten games.

Compayré, Gabriel. *The Intellectual and Moral Development of the Child*. Trans. by Mary E. Wilson. International Educational Series. New York: D. Appleton & Co. 1896. 2 vols.

Chapter 12 (in press) discusses the age at which the play instinct develops, and its importance.

Eastman, Dr. C. A. E. *Recollections of the Wild Life. Plays and Games*. In *St. Nicholas*, February, 1894.

General description of the physical and dramatic games played by Indian boys.

Froebel, Friedrich. *Mothers' Songs, Games, and Stories*. Trans. by Frances and Emily Lord. London: Wm. Rice, 86 Fleet street. 1892. pp. xxxv+286.

Games arranged by Froebel for mothers to play with their children. A deep, symbolical, spiritual meaning underlies each play. Illustrations, critical notes, and music.

Games of Savages. In *Saturday Review*, vol. lviii, 1884. London. pp. 303-304.

Argues for evolution, not invention, of games.

Gomme, Alice B. *Children's Singing Games*. London: David Nutt. 1894. pp. xii+70.

Six English games, illustrated and set to music. Contains also geographical notes and directions for playing.

Gomme, Alice B. *The Traditional Games of England, Scotland, and Ireland*. London: David Nutt. 1894. pp. xix+400.

The work covers about 450 games, carefully described, with songs, music, cuts, historical references, notes on dis-

tribution, and authorities. It makes no attempt at classification or psychological analysis. It carries the collection to *N U*, and is the beginning of a great systematic collection of records of children's activities on which sound scientific generalizations must ultimately rest. A long list of authorities is quoted, but only some ten or a dozen are available for general reading. References are not complete enough to be of much value.

Hall, G. Stanley. *Story of a Sand-pile*. In *Scribner's Magazine*, June, 1888. Vol. iii, pp. 689-696.

The story of how some boys established a mimic community on a sand-pile, and developed it during several summer vacations.

Johnson, G. E. *Education by Plays and Games*. In *Pedagogical Seminary*, vol. iii, No. 1. Worcester. pp. 97-133.

A study of the educational value of play. One hundred and forty games are analyzed and arranged in groups of different grades, on the basis of their usefulness in developing certain powers of the mind or certain parts of the body. A good general reading list is appended. References complete, and on spontaneous as well as traditional plays. Most of the books are in English.

Johnson, John. *Rudimentary Society Among Boys*. In *Overland Monthly*, October, 1883, and July, 1884. Extended and published in *Johns Hopkins University Studies in Historical and Political Science*. Baltimore. 1884. Vol. ii, pp. 495-546.

One of the most suggestive things that has ever appeared in the study of social embryology. Observations covering several years were made on the social conditions existing among the boys on a farm-school of 800 acres. It traces the evolution of property right from community property, through a land-holding aristocracy, to a socialistic party again demanding community property. Shows also the development of judicial procedure and of boy economy. Draws analogy between development of this society and of the Aryan race.

Lagrange, Ferdinand. *Free Play in Physical Education*. In *Popular Science Monthly*, April, 1893. pp. 813-820.

Comparison of the relative value of free play and of set gymnastics as means for physical development, especially among younger children.

Newell, William Wells. *Games and Songs of American Children*. New York: Harper & Brothers. 1884. pp. xii + 242.

Descriptions of 160 games, with accompanying songs, music, and cuts. A premature attempt is made to trace the origin of these plays, with their geographical distribution, and to work out a scheme of classification. A bibliography of some sixty-five references on traditional rhymes and games is added, but only four of the books are in English.

Owens, John G. *Some Games of the Zuñi*. Popular Science Monthly. May, 1891. Vol. xxxix, pp. 39-50.

Physical games, involving skill, played by Zuñi boys. Descriptions of games resembling our Quoits, Battledore and Shuttlecock, besides several national games.

Powell, J. W. *Annual Report of the Bureau of Ethnology to the Smithsonian Institution*. Washington: Government Printing Office. 1881-82; 1884-85; 1887-88; 1889-90. pp. lxxiv + 606; xlv + 617; lvii + 672; xlvii + 551.

See indexes for games of North American Indians.

Richter, Jean Paul. *Levana on the Doctrine of Education*. Boston: Ticknor and Fields. 1886. pp. 400.

Richter treats of the meaning of play to children. He brings out the fact that children's playthings are alive to them. Emphasizes the value of play with other children. pp. 82-95.

Sisson, Geneva. *Children's Plays*. Reprinted in these *Studies*, p. 172, from the Pacific Educational Journal for June, 1894. pp. 260-265.

A description of spontaneous play activities in the Santa Cruz kindergarten, with an attempt at classification.

Sully, James. *The Imaginative Side of Play*. In Popular Science Monthly for September, 1893, and in *Studies of Childhood*. New York: D. Appleton & Co. 1896. pp. viii + 527.

Treats of power of imagination to cause child to merge his actual self in a creation of his mind. pp. 35-51.

Tylor, Edward B. *History of Games*. Fortnightly Review, vol. xxxi, 1879. London: Chapman & Hall. pp. 735-748.

Believes that migrations can be traced by the advent of games just as Müller traces them by language.

———. *Primitive Culture*. Vol. i. New York: Henry Holt & Co. 1889. pp. xii + 500.

Finds that many children's games of to-day reproduce early stages in the history of mankind. They are only sportive imitations of what were then the occupations and religious rites and beliefs. pp. 72-83.

Within the past thirteen years several syllabi have been prepared with a view to gathering data concerning the play instinct in children and its expression in their games. The following are those with which we are acquainted:—

Hall, G. Stanley. *The Study of Children*. N. Somerville, Mass. 1883.

Barnes, Earl. *Studies on Children. Plays*. Cornell University. 1889.

Winship, A. E. *Play Tendencies. A Child Study*. In Journal of Education, June 1, 1893.

Barnes, Earl. *Children's Plays*. Leland Stanford Junior University. 1893.

Merrill, Jennie B. *Study of Children's Interests*. Street plays. Sent out by Committee on Child-Study of the Associate Alumnae of the Normal College. New York. 1893.

Barnes, Earl. *Children's Plays*. Leland Stanford Junior University. 1894.

Smith, Margaret K. *Observation of Children. Schedule viii. Child at Play*. Oswego Normal and Training School. 1894.

Hall, G. Stanley. *Dolls and Toys and Playthings*. Clark University. 1895.

Fletcher, Helen, under the direction of M. V. O'Shea. *Study on Children's Games*. School of Pedagogy, Buffalo, 1896.

Barnes, Earl. *Study on Children's Games*. Leland Stanford Junior University. 1896.

DISCIPLINE AT HOME AND IN THE SCHOOL.

V. HOW TO WORK UP THE EVIDENCE.

EARL BARNES.

Nine-tenths of the studies on children projected in our country never get beyond the stage of sending out a list of questions. It is very easy to write and publish a prospectus, but when it comes to collating the evidence, nothing but hard work, persisted in day after day and week after week, will reach any sound results. This genius is as rare among students of pedagogy as among other classes of students, possibly rarer; and so it comes, that while the past months have produced some hundreds of outlines and syllabi, telling us how to study children, we have only about a dozen printed studies actually based on careful compilations of evidence.

In this paper we shall take it for granted that you have collected the papers on discipline, have examined them carefully, and have passed judgment on their value as evidence, and that you are now prepared to work up this evidence into some form of generalization. How shall you go to work? The easiest way is to read the papers through, gathering impressions as you read, and then to write out these impressions. The difficulty in this method lies in the fact that the mind that interprets by impression is apt to see only what it wants and expects to find. The make-believe induction simply intensifies the dogmatic quality of the product. At the same time, it is true that this impressionist work often catches the spirit and movement of a phenomenon in a way that transcends the possibilities of quantitative expression. It is this kind of study that gives us our novels and our poems, and such delightful work as one finds in the volumes written by Kate Douglas Wiggin, but—it also gives us much of the gush and twaddle that fill the pages of many of our so-called educational journals. It all comes back to this: one sees by this method what he already has in his mind, brightened and intensified.

Taking it for granted, then, that this material is to be worked up in quantitative form, how shall we do it? The method one is inclined to follow at first is to analyze each paper into all of its constituent elements, to spread these elements out on a sheet of paper, and then to select some prominent one and collect all the fragments of that kind that can be found on the sheet. Take, for instance, the following paper:—

“One day I was intending to go to a picnic and was about ready to go when our next door neighbor’s boy said I had been in swimming in the canal (He said that because he couldn’t go and knew Mother had prohibiting me from going in swimming under penalty of staying home from the picnic) So Mother believed him and kept me home all day and the other boy tried to get me to play with him but I wouldn’t. The next day I fixed him.

“Henry, Age 14.”

By this method, we should write down in a line running across a long page: *boy—14 yrs.—accused of swimming—deprived of picnic—unjust because lied about—punished by mother—he got even with the one who lied.* The next paper would be taken up in the same way, spreading out the elements in another long line under the first. The first article in this issue of the *Studies* was worked up in this way, and a good illustration of the method is to be seen in Mr. Taylor’s study on *Children’s Hopes*.¹ It is a laborious and truly Baconian method. Its weakness lies in the fact that the selection of elements along the line of some question, suggestion, or hypothesis must still be made after this laborious analysis has been performed, and it can be made quite as well—and, in some cases, even better—without going through the complete dissection.

The most effective way to work up the evidence quantitatively is probably something like this:—First, separate the papers for just and unjust punishments; then for sex and age, so that all the papers for just or unjust punishments, and for either sex and any given age, are brought together in a separate package. Then read through a bunch of the papers, say one hundred, putting down on a sheet of paper the headings or rubrics under which you think you may hope to gather some suggestive results. Take, for instance, the following paper:—

“I was punished for running away and I didn’t deserve it, because I wanted to look for a bager that I saw going across a field. I didn’t get the

¹Taylor, J. P. *A Preliminary Study of Children’s Hopes.* In Annual Report of the State Superintendent of Education of the State of New York. 1895-96. pp. 992-1012.

bager. The bager run up a hill and when he got on the other side of the hill I lost sight of it and went home and told my mother and she didn't care that I went but she ponished me because she said that I would always run away if I didn't get a ponishment, so she gave me a scolden and I was mad at her.

George, 12 years old."

Now, as you read this paper, you see that it will probably be of interest to keep a record of the offense, the punishment, and the reason why the child considered the punishment unjust. It may also be of some value to keep a record as to whether the punishment was received at home or at school. As you go on reading more papers, your judgment is gradually modified, until you find an outline forming under your hands something like the following:—

- | | |
|-------------------------------------|--------------------------------|
| I. Never had any unjust punishment. | IV. Offense— |
| II. Punisher— | Talking or whispering. |
| Parent. | Destroying things. |
| Teacher. | Neglected work. |
| Nature. | Taking things, or stealing |
| Some child without authority. | Story-telling, or lying. |
| Some adult without authority. | Running away. |
| Indefinite. | Tardiness. |
| III. Punishment— | Fighting, or quarreling. |
| Whipped. | General disorder. |
| Confined. | Miscellaneous. |
| Scolded. | V. Reasons why unjust— |
| Marks or checks. | Not guilty. |
| Sent to bed. | Act was right. |
| Lose meal. | Ignorance. |
| Shake, strike, or slap. | Didn't think. |
| Lose a treat. | Was provoked. |
| Extra task. | Couldn't help it. |
| Correct the harm. | Punishment was wrong kind. |
| Miscellaneous. | Partiality was shown. |
| Indefinite. | Indefinite. |
| | VI. Defective evidence— |
| | Papers illegible. |
| | Statements self-contradictory. |
| | VII. Changed point of view. |
| | Have changed my mind. |

The headings selected should be neither too specific nor too general. If they are as specific as "Scolded for spelling separate incorrectly," you will have as many headings or rubrics as you have instances, and your method will be the same as the second one

described. If your headings are as general as "disorder," your work is lost in a vagueness of definition that destroys its value.

An objection naturally made to this plan is that it is full of cross-classifications. This is, however, inevitable when we are weighing evidence, for the particular form of the phrase often has significance; and so two or three phrases, like *talking or whispering* and *disorder*, may be kept as heads for collating, because, while they are cross-classifications, they still express shades of offense or feeling that we may afterwards wish that we had kept separate.

Having selected your headings, write them down on the left hand side of a liberal sheet of paper; draw some vertical lines to the right, devoting the first space to six-year-old children, the next to seven, and so on. Black ink for entering boys' papers and red for girls', is a convenience. The actual collating of the papers is slow, laborious work. Each paper must be read, analyzed into its constituent elements, and marks entered under the appropriate headings. It adds greatly to the effectiveness of this work if two people read and analyze the papers together. All the evidence should be used. If it does not fit into your collating scheme, then that fact condemns the collating scheme, and it must be modified by adding new titles or changing some of the headings. The problem of reducing the sifted evidence to numerical tables will be considered in our next issue.

THE STUDY OF ENGLISH IN AMERICA AFTER THE REVOLUTION.

AGNES SINCLAIR HOLBROOK.

During the fifty years succeeding the Revolution, the best talent of the country was struggling to perfect the government. Little direct time and thought were given to educational affairs. The tremendous growth in population, trade, industries, and social complexity hurried men into shaping laws and interpreting them. New territory had to be welded into the half-formed Union, a definite policy had to be wrought out of conflicting theories. The States had to be unified, and their footing secured among the nations of the world, before much attention could be given to the needs of the rising generation.

In the midst of this stress of our "critical period," with its conflict of tempers and tendencies, it is not strange to find two notable makers of books, each representing a different set of ideas and hopes. On the side of the Conservatives, with Tory sympathies, stands Lindley Murray, while Noah Webster stands for the cry of Americanism. Perhaps Lindley Murray represents the larger writing class of his immediate time. Most of the new text-books that appear are mild and conservative in tone, and strike one as the products of minds unable or unwilling to meet the real issues of the day.

The aim seen in many books of this time is certainly not a progressive one. The feeling that the young must some way be held down is evident,—perhaps only as a survival of Puritanic principles, perhaps as a reaction from the liberal tendencies threatening to run riot in all branches of thought. The *American Monitor* (1800) wishes "to impress a prejudice in favor of the existing order of things," stating outright that "this system is the result of a profound policy," and seems to desire rather law-abiding than ethical or independent citizens. Moore's *Monitor* (1809) wishes to "improve the manners, the intelligence, the will, to purify passions, to direct youth," also "to teach reading, writing, and spelling," while Staniford's *Art of Reading* (1805) similarly tries "to improve the

young in reading and speaking," and "to inculcate virtue and religion." A certain technical excellence and a rather flabby general culture are the ideals held up by these authors.

Were it not for Lindley Murray, we should hardly be able to understand the excellencies of this type of text-book. His Grammars and Readers, undoubtedly the best of this sort, appeared from 1795 onward, and were widely used both in this country and in England. He tells us that his books are "to convey clear and precise information," "to improve learners, and imbue them with a love of virtue," "to teach them to read with propriety and effect," "to improve their language and sentiments," "to inculcate principles of piety and virtue." His Readers are made up of prudential warnings, discourses on *Filial Piety, Ingenuity and Industry Rewarded, Respect and Affection due from Pupils to their Tutors, The Folly of Pride*, and a host of similar selections, bristling with youthful obligations and utilitarian morals. The theology of the *New England Primer* is supplanted by a conventional abstraction called propriety or virtue, and the teaching bears a curious resemblance in spirit to the intensely conservative, undeniably lofty, but dead and uninspiring *Li-Ki, the Sacred Books of China*. One is oppressed in both with the authoritative side of life,—duty, memory, unquestioning obedience to custom; with the ceremonial train,—forms in language, in dress, in thought; with respect for elders, ancestors, for what has been, with the weight of the dead hand of the past paralyzing the struggling powers of the present.

We are astonished, in examining Murray, at his complete unconsciousness of the rising democracy. His long-continued residence in England, and his close contact with European institutions, contribute to explain this fact, but the sufficient reason, doubtless, lies in the native bent and temperament of the man himself. A courteous, well-behaved, straight-laced old Quaker gentleman (one is sure, after reading his *Memoirs*, he was born at least fifty), Lindley Murray is irreproachable in manners and current morals, and concerns himself with little else. He lived in "the critical period of American history," but we find in him no yearnings after liberty. Yet there is no doubt he was in close touch with the intellectual side of Colonial days, and represents an element in American life which was strong to the very time of the Revolution, and claimed an honorable following well into this century. An upright, prim, and,

withal, gentle element, content to do as its fathers did, and not too much disturbed by doubt or growth.

In these books of Murray's, there is no illustration, and the literature is of the severely moral type. There are two Readers supposed to supplement one another, and here we see the beginnings of what later develops into the serial texts. The Grammar is followed by a book of exercises, and, in the whole set, not only grammar, reading, and spelling, but rhetoric, elocution, and something like literature proper begins to gather into distinct groups. The method is the same in all departments, and is pervaded by rules. Rules are laid down to be committed to memory, after which follow examples and illustrations, the bulk of them incorrect; for, as Mr. Murray points out, "It is a sentiment generally admitted that faulty compositions are more instructive than examples of propriety." The Grammars follow in the wake of the *New England Primer*, and begin with letters, combinations of letters, monosyllables, dissyllables, polysyllables, sentences short and long, then take up the dreary round of Orthography, Etymology, Syntax, and Prosody, with remarks on punctuation, winding up with "general observations for promoting perspicuity, purity, propriety, and precision." "Memorizing is facilitated by the selection of smooth and voluble terms, the observance of proportion in the members of a sentence, the avoidance of protracted periods." Man is conceived as a series of compartments, each of which must be successively filled with suitable material, rounded and flowing phrases being supposed to slip most readily into the sockets of the mind. One recalls Pope's scathing comment,—

"But most by numbers judge a poet's song,
And smooth or rough, with them is right or wrong,"

and by it Mr. Murray stands convicted.

The Readers also begin with rules; and here, too, the negative form flourishes. After bidding the pupil "avoid a thick, confused, clattering voice," and filling his mind with the possibility of this and some dozen similar disasters, they plunge him into the mysteries of literature. Even in this field the synthetic method pursues him, and he progresses by rigid gradations, beginning at *To be good is to be happy*—simple, at least, in grammatical form,—and winding up at *The Man of Ross* and *The Dying Christian to His Soul*, more intricate in structure, if not less adapted to the infantile point of view. It

is characteristic of Mr. Murray and the method he represents, that the first lessons in reading should consist of abstract generalizations, the last of concrete instances and examples. The entire procedure is from the general to the particular, from the rule to the illustration.

There is no very striking contrast between the essential notions of man's nature held by the Puritan and the Quaker. Both are rigid, uncompromising, and bound up with the same harsh beliefs as to the innate perversity of man. Conformity and obedience are the educational gods of both; but the former regards man rather as a spiritual creation, the latter as a piece of mechanism; the former rests on revelation, and the latter on usage. Murray's impersonal views of human life and *a priori* methods of instruction are best comprehended in the cold light of the philosophy of "innate ideas," — a philosophy rankly odorous of Chesterfield's artificial breeding, but touched with the genuine philanthropy of Bentham, and thereby redeemed from undiluted utilitarianism. It is easy for Philistine judgments to exalt ready-made ethics and mechanical methods to the rank of actual virtues; but we cannot forget that it is seldom given to the plausible ideals and natures, upon which "success" often smiles, to produce that which interprets human life profoundly, and leads it onward through higher and better ways to fuller self-realization.

If we recognize, then, a germinating period, in which Mr. Murray and a few satellites appear rather as survivals of a preceding age than as links in the direct line of development, we may conclude its aim was rather moral than theological, and directed toward an ideal we may call *the eternal fitness of things*. Its method was quite as logical as that of the *New England Primer*, but more expansive; it proceeded from abstract to concrete, and was governed by set rules, dependent in no way upon the development of the children, but self-existent and self-sufficient. There is no idea of the individual as possessed of divine intuitions in any of the philosophies thus far, — authority from without is all-powerful. For the *New England Primer*, the tribunal from which there is no appeal is contained in the Holy Scriptures, and that of Murray in the logic of the mind.

But if Murray represents the old Tory feeling and propriety, we find in the books of Noah Webster a natural outcome of the Revolution. His first work, modestly announced as *A Grammatical Institute of the English Language, comprising an Easy, Concise*

and *Systematic Method of Education, designed for the Use of English Schools in America*, was published less than ten years after the Declaration of Independence; an *Account of the Historical Transactions of the United States after the Revolution*, also used as a reader, in 1788; and a volume of *Essays*, in 1790. If the first bears traces of the lingering spirit of conservatism, the second and third resound with the radical notes of freedom and independence. When Webster says, "I am attached to America by berth; education, and habit, but, abuv all, by a philosophical view of her situation, and the superior advantages she enjoys, for augmenting the sum of social happiness," we feel that he has sounded his key-note. He is a scholar, an essayist, and a philologist; but, above all, he is an American. If he is an educator, it is in the broad sense of the term—he taught a few years in an incidental way, but the details of the typical schoolmaster never engrossed him. Many of the defects of his text-books, especially their artificial methods, are doubtless due to his want of immediate experience; while their excellencies are due to breadth of interest, impossible then to the pinched and humble teacher. For this reason, his collective work is best judged, not as the output of the practical worker, grappling with the problem of how to get living children to read, but as a contribution to the cause of education from a patriot who believed the permanence of the nation would be largely determined by the trend and character of public instruction.

The *Institute* was published in three parts, Speller, Grammar, and Reader, and so much was it used that the author felt justified in stating that "the spelling-book does more to form the language of a nation than all others combined." By 1876, some seventy million copies had been sold, and, as late as 1880, the annual sale was estimated at one and a quarter millions.

Webster is never guilty of self-depreciation, nor of small, weak aims, and in this he is perhaps also truly American. His *First Part* announces that it "is calculated to improve the Mind, and refine the Taste of Youth;" and also "to instruct them in the Geography, History, and Politics of the United States,"—to furnish "Rules in Elocution and Directions for giving Expression to the Principal Passions of the Mind," while his *Essays* intend to "diffuse a spirit of Inquiry favorable to Morals, Science, and Truth," and roundly "to aid the Principles of the Revolution," and "to sup-

press Political Discord." His Reader contains much perfunctory matter,—receipts for virtue, records of proper living and thinking, done up in neat packages, quotations from Dryden and Pope and the formal writers who held first place in public estimation. But they contain something else. There are addresses *On Representation, Publick Justice, The First Congress in 1774, The Karacter of our Institutions, Remarks on Division of Property, Guverment, Education, Religion, Agriculture, Slavery, Commerce, Climate, and Diseezez in the United States*. There is a courage and dash about all this that we have not found before. We are brought into a more stirring world,—bounded geographically, perhaps, by the limits of the United States, but including in its scope all the manifold interests of republicanism.

The method of the *Institute* is an advance upon the *New England Primer* in execution, if not in conception. Illustration is sparingly employed, and a few fables show some recognition of children's native lines of interest. On the whole, however, Webster holds to synthesis, and builds up from the alphabet and *ba be bi bo bu by* to *an-ti-trin-i-la-ri-an* and *val-e-lud-i-nar-i-an*. The three parts are more highly specialized than the *Primer*, and we have a speller, grammar, and readers instead of the one undifferentiated text. The books are divided into progressive lessons, and diacritical marks are introduced as guides in pronunciation. The famous Speller is also used as a reader, each list of words being followed by a number of sentences, obviously utilitarian rather than literary in character. The lists must be illustrated, though the words be dragged in by the very hair,—*I am up, he is in, we do go so*,—and similar sentiments not remarkable for their lucidity, greet the beginner. Further on, Webster's talent for definition asserts itself, and the reading lessons are metamorphosed into explanatory lists of terms used, as,—“Botany is the science of plants,” “An elegy is a funeral song,” “History is an account of past events,” “Language or speech is the utterance of articulate sounds rendered significant by usage for the expression or communication of thoughts.” How much of this strong meat was assimilated by the tender youth, or even the average teacher, we can only infer,—but that it suited the taste and capacity of the scholarly Webster we are sure. The philological genius of the man asserts itself in a short treatise on the formation of tenses and plurals, the significance of prefixes and suffixes, while a table of

Words and Phrases from Foreign Languages, frequently occurring in English books, rendered into English, and Abbreviations Explained, at the end of the volume, shadow forth the familiar dictionary with its appendices.

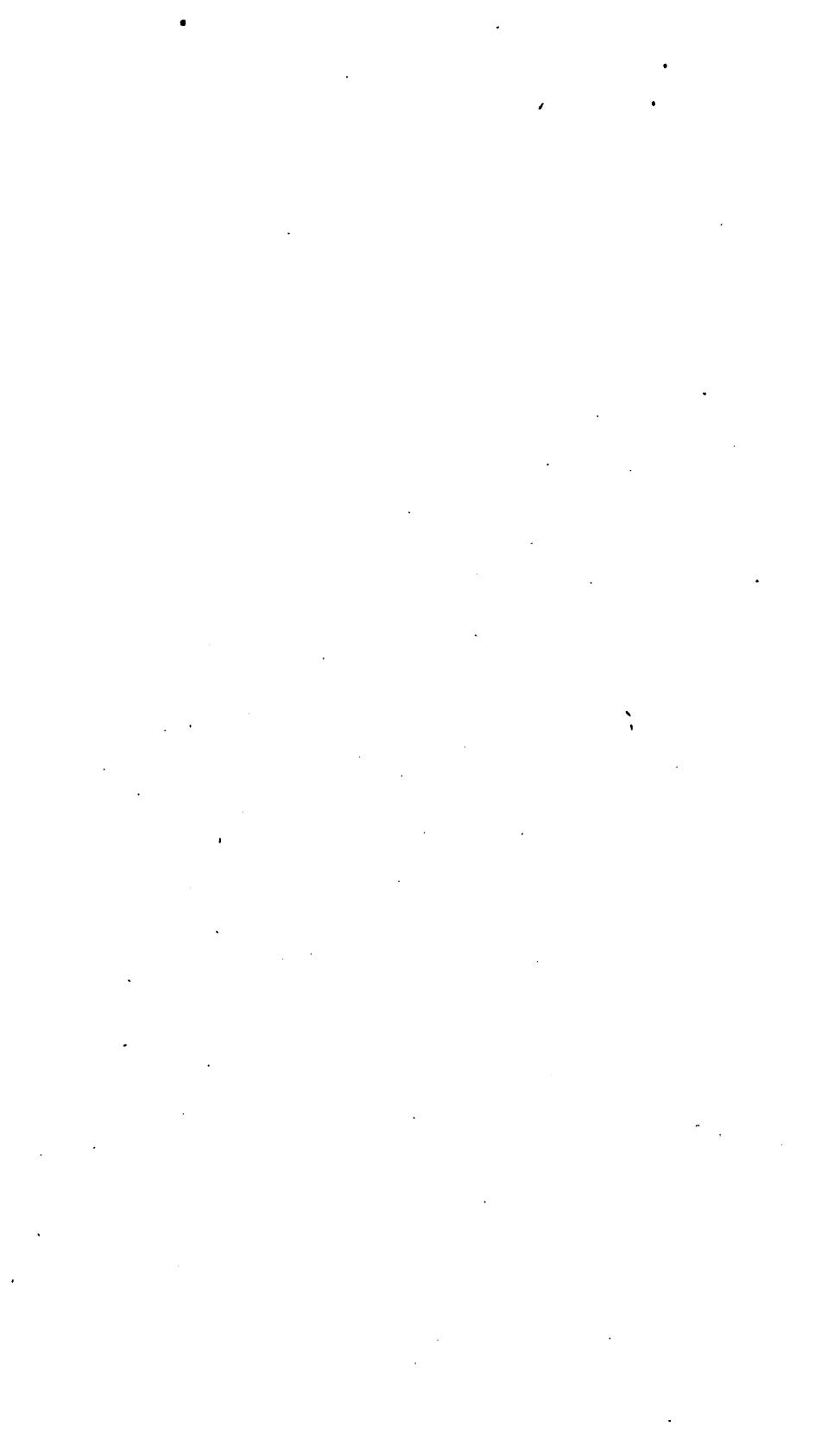
In all this we feel the distintegrating touch of the finger of freedom. Webster's belief in the liberty of thought, though it does not lead him to adopt new methods in education, does lead him to break from conventional presentations and to approach his subject with a largeness and open-mindedness almost encyclopedic. The leaven of freer inquiry and enlarging interest is working toward democracy and construction in the nation, and filtering more slowly into the schools. Nowhere does one feel more keenly the intimate relations between politics and education, between statecraft and schoolcraft, between the government and the training of citizens, than in the period following our Revolutionary War. When the colonies assert themselves, and enter upon a life of their own, the very Readers in the schools ring with patriotism and emancipation. To study even one branch of education, is to study the whole history of a country's civilization.

Webster's philosophy is already indicated. Make a perfect State, and you will have perfect men. He conceives man first, last, and always as a citizen, and particularly as a subject of the United States Constitution. If the tradition of man's depravity still lingers with him, it is but slightly and conventionally touched upon, while the way of salvation is plainly indicated to be in the perfection of our institutions. Redemption through creeds and catechisms retires a step, although it is not denied. It is seen to be worth while not only to interest men in preparation for life after death, but also in that department of this life sanctioned by the nation. The sacredness of individuality is not yet recognized, but the integrity and excellence of the nation becomes a living factor in men's lives.

These books, then, mark the rise of Americanism in school-texts. Their aim is to make patriots, their method one of logic and synthesis, but expanded and varied, to express the widening spirit of the time. Ideals are not only vested in theological dicta, but in government documents. The Bible of the Puritan shares its authority with the Constitution of the United States.

Studies in
Education

VI.



STUDIES IN EDUCATION

EDITED BY

EARL BARNES,

Professor of Education in Leland Stanford Junior University.

DECEMBER, 1896.

	PAGE.
A STUDY ON CHILDREN'S INTERESTS—Earl Barnes	203
CHILDREN'S ATTITUDE TOWARD LAW—Estelle M. Darrah	213
REMINISCENT STUDY: VI. CHILDREN'S INTEREST IN PLANTS— Katherine A. Chandler	217
POLLIWOGS AND FROGS—Illustrated	223
DISCIPLINE: VI. THE REDUCING OF DATA TO NUMERICAL TABLES— Earl Barnes	228
MY EDUCATIONAL RECOLLECTIONS: I.—Hermann Krüsi	230
AGNES SINCLAIR HOLBROOK	240

VOL. I.
No. 6.

STANFORD UNIVERSITY,
1896.

\$1 a Year.
15 c. a Copy.

STUDIES IN EDUCATION.

These studies begin with July, 1896. They will be continued as a monthly publication for ten numbers. The last number will contain an index, and a full table of contents. The cost for the year is one dollar, or fifteen cents a number. Address all inquiries or subscriptions to

EARL BARNES,
Stanford University,
California.

Entered at the Post Office in Stanford University as Second-class Mail Matter.

A STUDY ON CHILDREN'S INTERESTS.¹

EARL BARNES.

The object of this paper is to find what qualities of objects most interest children of different ages. We have come, during the past few years, to base much of our teaching on a study of the common things that surround children in their homes or in their out-of-door life. Elementary science occupies a prominent place in all our courses of study in the public schools, and our lessons in reading, number, language, and drawing are based on a study of concrete things. In studying objects with very young children, we generally attend to their color, form, size, material, and arrangement of parts. In doing this, are we following the natural lines of the child's development? Are we moving along his own native lines of interest?

Of course, it may be said that in education we must follow, not the child's natural line of interest, but a line laid down by philosophy, theology, or our own views concerning the aim of life; but, even admitting that the natural tendencies of humanity are wrong, and must constantly be corrected by some theory, it still holds true that to make an effective start at any moment we must know where the child is at that moment; even if we are not to follow his natural tendency, it will help us greatly to know what the natural tendency is, that we may overcome it. So for the philosophical as well as the scientific student of pedagogy, the question is one of first importance.

In the *Revue Philosophique* for December, 1890, appeared an article by Alfred Binet on *Perceptions d'enfant*, in which he described experiments on his two little girls, one two and a half and the other four and a half years old.

He asked them what they meant by common words, such as horse, clock, and bottle, and wrote down exactly what they answered. After a month or six weeks he repeated the same list; and after some fifteen such experiments he collated the results. Judging from their

¹ Reprinted, with slight changes, from *The Pacific Educational Journal*, February, 1896.

answers to these questions, their greatest interest in these common objects lay in their use, and, in the second place, in their movements. They almost never described an object by telling its color, form, size, material, or structure. They gave, not its qualities, but what it was good for, and what it could do.

It seemed to me that this might prove a very instructive study for teachers, especially if we could compare children of different ages, so as to trace the lines of development as old interests change or new ones appear.

At an institute in Monterey County the teachers expressed a willingness to assist me in gathering the data, and so, through the kindness of Superintendent Job Wood, the following circular was sent out:

OFFICE OF THE COUNTY SUPERINTENDENT, }
SALINAS CITY, October 7, 1892. }

To the Teachers of Monterey County:

At our late Institute, some of you expressed a willingness to assist Professor Earl Barnes in collecting children's definitions of common objects, in order to see what qualities or attributes of such objects most forcibly impress their minds, and are presumably most attractive to them at different ages. Such a study will throw light on the way in which elementary science, and possibly other studies can be most easily and profitably taken up in the different grades.

It would assist much in reaching these conclusions, if you would, the day after receiving this circular letter, provide all the children in your room with paper and pencil, at the composition or spelling hour, and read them the following directions as an exercise in written work.

Write at the head of your sheet the name of your teacher, your own name and your age. What is a

knife,	mamma,	earthworm,
bread,	potatoes,	shoes,
doll,	bottle,	finger,
water,	flower,	clock,
arm-chair,	snail,	house,
hat,	mouth,	wolf,
garden,	lamp,	omnibus,
piece of sugar,	bird,	balloon,
thread,	dog,	village,
horse,	carriage,	box,
table,	pencil,	handkerchief.

Please give no other directions. Do not ask the children to define *horse*, or tell what the horse can do, what he is like, or anything of the sort, as such questions will suggest to them other ideas than those which naturally arise on hearing the word *horse*. Please do not tell the children what is to be done with the work, and do not ask them to be careful, as we wish their spontaneous, off-hand work.

Gather up the papers and forward to this office, with any generalizations or suggestions that they may give you. These papers are in no sense an examination of your work, and they are not to be considered at all from the point of view of spelling or grammar. They will be forwarded to the educational department of the Leland Stanford Junior University, where the data will be generalized and the result printed in the February number of the *Pacific Educational Journal*.

Adapted from the work of Alfred Binet in the *Revue Philosophique*
for December, 1890.

JOE WOOD, JR.,
County Superintendent of Schools.

Returns were sent in from more than two thousand children, and the papers of fifty boys and fifty girls of each age, from six to fifteen inclusive, were taken on which to base our generalization. Thus the work of one thousand children was collated, the papers being taken just as they came—good, bad, and indifferent.

An examination of the papers showed that the answers could be grouped under the following general heads: *Use*,—a clock is to tell the time; *larger term*,—a clock is a timepiece; *action*,—a clock goes tick-tack; *quality*,—a clock is pretty; *place*,—a clock is on the wall; *color*,—a clock is yellow; *form*,—a clock is round; *structure*,—a clock has a face and wheels; *substance*,—a clock is made of wood and iron.

Often a single answer would give several attributes of the object; as, for example: A knife is a tool made of iron having a blade and handle, and is used to cut bread. The several statements of this definition were collated under larger term, substance, structure, and use. Each entry was made so as to show whether the definition was single, two-parted, three-parted, or four-parted. In all, 37,136 statements were collated, and the results are embodied in the table on the next page:

NUMBER OF STATEMENTS GIVEN BY 1000 CHILDREN.

UPPER NUMBER—BOYS. LOWER NUMBER—GIRLS.

	6 YRS.	7 YRS.	8 YRS.	9 YRS.	10 YRS.	11 YRS.	12 YRS.	13 YRS.	14 YRS.	15 YRS.	TOTAL
Use {	1246 1238	865 962	989 1155	997 1083	984 984	797 780	819 946	756 825	841 724	747 676	9041 9373
Larger Term {	42 54	108 111	120 94	222 163	167 250	282 423	334 348	494 573	496 561	811 952	3076 3529
Action {	72 18	101 127	85 118	67 74	70 85	88 72	73 75	57 106	71 72	51 47	735 794
Quality {	30 28	55 24	83 37	38 60	33 37	109 119	98 73	87 211	95 96	70 68	698 753
Place {	6 2	27 13	36 53	46 43	64 85	86 105	103 132	132 127	78 119	97 71	675 750
Color {	14 6	37 7	5 11	12 13	9 3	9 8	5 5	7 8	12 17	17 5	127 83
Form {	6 2	9 23	8 25	22 12	12 18	39 30	33 28	55 88	62 44	68 74	314 344
Structure . . . {	18 18	20 20	26 35	53 33	48 63	64 78	137 92	150 180	150 167	141 157	807 843
Substance . . . {	26 32	49 22	67 72	137 66	126 125	181 184	227 218	271 273	171 233	251 261	1506 1489
Unclassified . {	148 134	151 171	89 91	51 82	167 118	88 57	229 123	166 119	27 109	62 20	1178 1924
Total	3140	2902	3199	3274	3448	3599	4098	4685	4145	4646	37136

Before discussing the results of the study, it may be well to consider some of the objections which naturally arise concerning the validity of results to be reached from such data. In the first place, it may be said, that in studying such data we are dealing with accidents that cannot be reduced to quantitative expressions. An examination of the charts here printed, and of the numerical table, will show that these data yield to mathematical statement as readily as do physiological processes or the data of sociological or economic development.

Again, it may be claimed that young children will give the definitions that come within the range of their vocabulary, and that this limitation will prevent their showing the real lines of their interest. But this objection vanishes if it is remembered that children learn their vocabulary along the lines of their greatest

interests, naturally picking up the names of things and actions in which they are most interested. It may also be said that since children are taught definitions in the school, we can get no spontaneous expressions from them. But the fact is, that in the Monterey schools there is little formal defining done; and, in the data collated, there is great individuality shown, though the children follow certain definite lines determined by age and not by schools. Again, it may be thought that the words were badly chosen, in that they give little opportunity for the expression of color, and possibly of some other qualities. It would certainly seem possible to select a better list; but Binet's list was used that we might compare our results with his. The list is, beside, varied, and gives abundant chance for expressing form, substance, structure, quality, place, and motion; it also gives a chance to study the treatment of unfamiliar terms, and while the words are common, they are not particularly utilitarian.¹ It was desirable in this preliminary study to use only concrete terms.

The chart on the next page shows the results with the children seven, eleven, and fifteen years old, together with an analysis of Webster's definitions of the same words. In looking at the chart of seven-year-old children, one is struck with the preponderance of the definition of *use*. Children at that age consider that they have told you all about an object when they tell you what it is good for. "A horse is to ride," "A mamma is to take care of children," and "A box is to put things in." To the young child all things exist to meet some of his own particular wants; thus: "A village is to buy candy in;" "A bird is to make meat with, or is good to lay little eggs;" "A dog is good to catch flies;" "A mamma is good to cook, or to whip little children;" and "A wolf is good to get its hide." One boy says, "A steamboat is good to go up and down Monterey Bay for children to look at."

A very few young children give some larger term; as, "A dog is an animal," or "A house is a building," but the classifying instinct does not seem to be strong in them at this time.

¹ To my mind, the most serious criticism on this study is the charge that the list of words is not typical, but that it lends itself to the results. Some months ago we gathered five thousand papers, using a new list, which had been arranged to give more prominence to color, form, substance, and structure; but as I worked with the returns I realized that we were getting just what we were reaching for. And who could say that we had made a fairly typical selection? I am inclined to believe that the random list of Binet is better than any that could be selected.

CHART ILLUSTRATING USE OF DIFFERENT DEFINITIONS.

Boys _____

Girls

CHILDREN 7 YEARS OLD.

Use
 Larger Term
 Action
 Place
 Color
 Form
 Structure
 Substance

CHILDREN 11 YEARS OLD.

Use
 Larger Term
 Action
 Place
 Color
 Form
 Structure
 Substance

CHILDREN 15 YEARS OLD.

Use
 Larger Term
 Action
 Place
 Color
 Form
 Structure
 Substance

WEBSTER'S DEFINITIONS OF SAME WORDS.

Use
 Larger Term
 Action
 Place
 Color
 Form
 Structure
 Substance

A few children give actions or tell what a thing can do; as, "A dog runs;" "An earthworm flies around the earth;" or "A omnibus will eat you."¹ Scarcely any of these children say anything about the substance, structure, form, color, or general qualities of objects. Of course, the children know something about these attributes of the objects, and much could be drawn from them by skillful questioning; but we are here interested in what comes first to light when their minds are left free to act.

Omnibus, balloon, snail and earthworm are sometimes unfamiliar, but the children generally try to describe them just the same. Even common words sometimes draw out very absurd answers, showing that with children, as with adults who are learning a new language, a good deal of the work with words is simply guess-work; thus children say: "A omnibus is good to eat;" "A lamp is good to milk;" "Village is a small shanty;" "A snail is a little snowflake;" "A balloon is boards."

There is a strong tendency among the children at this age to adopt a certain form of words, that is suggested to their minds in the first answer, and carry it along, simply modifying it for subsequent words; thus, "A knife is made of iron;" "Bread is made of flour;" "A doll is made of wax," etc.; but, however the child of this age starts, he is sure to get around to "A — is good for —," as his general form.

With the eleven-year-old children use still leads, but is less extended than before; larger term has grown into respectable proportions; while substance has become very important, and structure, action, quality, and place are gaining considerable prominence.

In the fifteen-year-old chart larger term leads, use comes second, action is insignificant, except as included in use, while some of the other attributes become important, substance easily leading. Webster's chart simply carries the same tendencies one step further.

With the children of all ages substance and structure are hard to express; thus, "Shoes is a piece of skin sewed up;" "Box is a piece of wood sewed up square;" "A box is a kindy big woody thing;" "A bottle is a hole with glass around it." Of course, after eleven

¹ Prof. Oliver P. Jenkins has called my attention to the fact that most of the definitions of *use* also describe actions. The children describe an object by putting it in action, so as to satisfy their own particular desires or needs. "A horse is what takes us riding," or, "A knife is good to cut bread with," illustrates this combined use and action. To put it differently, the children describe not the static but the dynamic qualities of objects.

years old such examples are rare; but definitions of substance and structure remain, naturally, the most difficult definitions to give.

If one examines the tables, he finds a gradual change from year to year. Dealing with these common objects, the young children attend almost exclusively to their uses; gradually they become interested in classifying them into larger groups, and in noticing their qualities. At fifteen there is about the same proportion between definitions of use and larger term that we find in Webster, but the qualities are still much less developed.

In other words, the little children are primarily interested in the common objects of the world because of what they can be used for or what they can do; only later in life do they become actively interested in the qualities of objects, and then only gradually. Among these other attributes they are first interested in movements, then in what the thing is made of, and then in the parts of which it is made.

As would be naturally expected, the definitions become broader and contain more statements as the children become older. Thus the seven-year-old children give 2902 statements, the eleven-year-old give 3599, and the fifteen-year-old give 4646. The increase is not perfectly uniform from year to year. The fact that most of the six-year-old papers were written out by the teachers from the children's dictation, may account for the fullness of their statements, since the papers written by seven- and eight-year-old children often omit words, and these omissions are not taken into account in making up the table. The fourteenth year may mark a period of retarded intellectual development.

It is interesting to note the difference between the boys and girls throughout the study. Considering that the papers are taken at random from all over the county, it seems at first surprising that the diagrams are so similar; and a moment's examination of the charts shows that the differences are all in one direction. In all the essential lines of definition the girls lead the boys; that is to say, they give more statements about the objects than the boys do, and the differences are most marked in those lines of discrimination which show highest intelligence. Does this mean that they are better observers, or more studious, or that they have better powers of expression? If one examines the table, he finds that in the column at the right, marked "total," the girls' number, the lower one in each square, is generally superior to the boys'. In all, the five hundred

girls give 18,979 statements, while the five hundred boys give but 18,136.

Now, admitting that these tests really show the children's natural lines of interest, and that the work has been accurately done, what do the results teach us concerning educational work?

In the first place, they show that children's interests develop according to pretty definite laws, which can be determined and used as a basis on which to build educational activity. It is possible, in other words, to establish a course of instruction for the average seven-year-old children of Monterey County when we have made sufficiently extended studies in a sufficient number of directions, which will rest on as scientific a basis as our treatment of diphtheria with such children now does.

In the second place, they show that our natural history and other object lessons with primary children, if they are to appeal to their interest, must start with the uses and activities of objects, gradually lead out through what the things can do and what they are made of, to their structure, form, color, etc. In work with objects we generally start out with the superficial qualities, taking what Agassiz found to be interesting to college boys and applying it directly to primary children. We take an apple and say, What is this? What is it covered with? What is on this end? What shape is it? What color is it? etc., etc. This study seems to indicate that if we are to follow the child's natural bent we should start with a discussion of what the apple is good for. One of our new readers starts out with: "An apple is round like a ball;" this study seems to say that it would be better to start with: "The apple is good to eat;" or, "The apple grows on a tree."

Whether one accepts the theory that each individual lives over the history of the race or not, it is still interesting to note that in Homer or Herodotus one finds this same tendency to dwell on movement, use, and substance.

In the third place, the study shows that with young children we must not expect elaborate conceptions of the things about them. One or two of the most striking attributes of an object are sufficient to identify and describe it.

In the fourth place, the study shows that in knowledge of common objects, and in ability to express what they know, the girls of Monterey County are in no way inferior to their brothers.

In addition to these general conclusions there are many questions which are raised by the study, but which are unanswered.

How would the returns from city children compare with these data, which come mainly from country children? Does the small number of statements given in the fourteenth year mark a period of retarded intellectual development in that year? If one could carry this study along with an anthropometric study on a considerable body of children, would it not throw light on the debated question whether periods of retarded physical development are also periods of retarded intellectual development?

It has been clearly proved that girls are superior to boys in height and weight from the twelfth to the fifteenth year; after that the boys again lead the girls. Would this study show a similar intellectual movement if carried out with older children? How far does the tendency to define by giving general terms indicate a development in the use of comparison? It would also be interesting to carry out the study with a list of abstract words.

Professor Edward R. Shaw, in *A Comparative Study on Children's Interests*, published in *The Child-Study Monthly*, July and August, 1896, has worked over Binet's list, using the test suggested by Frances Galton. The words were pronounced in the pupils' presence, and they wrote down whatever ideas sprang into consciousness. The test was not tried on children under eight years old; but I question if children under the high-school period can successfully perform this rather difficult piece of introspective examination. Professor Shaw recognized the fact indicated in Note 1, page 209, and put the statement under *action* where they referred to putting a thing in motion for the benefit of some individual. This is certainly an improvement on our own work. By what seems to me a cross-classification, he considers part of the answers according to their form, instead of their content, and has a considerable group of instances under "*Sentence-making*."

In his results much of what we have collated under *use* is placed under his rubric *action*; and *larger term* is much less important than with us. *Quality*, a very vague rubric, becomes quite important. We need more such careful comparative work. Professor Shaw's study should be read in connection with this article as a corrective.

CHILDREN'S ATTITUDE TOWARD LAW.

ESTELLE M. DARRAH.

The botanist who has fruitlessly explored a dark swamp to find the pitcher-plants, which should grow there, is more than recompensed for his failure by the discovery of a fine orchid. In like manner, the student of child-psychology sometimes finds his test revealing a principle quite different from that for which he is searching. The present study well illustrates this fact. Designed to bring out children's feelings of partiality, it really discovered their attitude toward law

The study, sent out by our department to the schools of Napa County, reads as follows :

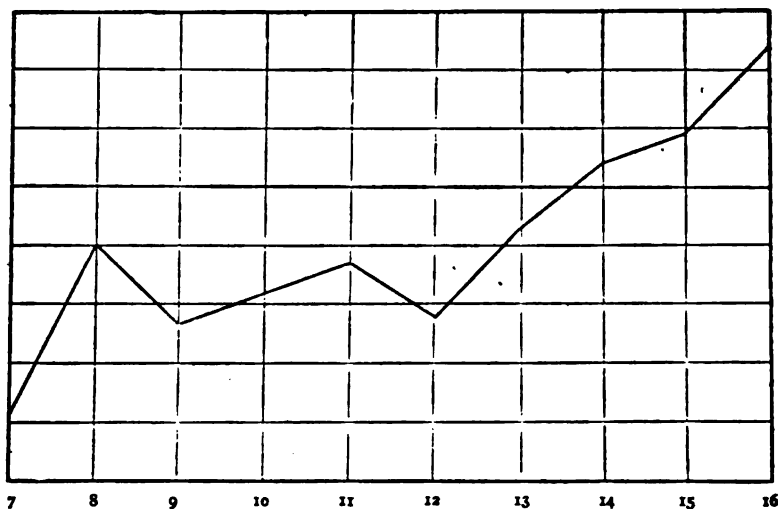
Two burglars broke into a house and stole some money. One escaped and could not be found. The other was caught. The regular punishment for such a burglary was five years in prison. What would you have done with the burglar who was caught ?

Written answers to this question were returned from one hundred children of each sex, between the ages of six and sixteen. Since the study suggested a definite penalty—five years in prison,—one might expect a repetition of this in the answers of the younger children; while in America, if anywhere, with our laws spasmodically enforced and disregarded, the older children might reasonably be expected to consider convenience, results, or the abstract justice involved, rather than the law in the case.

As a matter of fact, however, the majority of the younger children entirely ignore the law in fixing their penalties. "Hang him," "kill him," "shoot him," "put him in jail for life," suggest many seven- and-eight-year-old children. "I would have shot him or throw him in the crick and let him flote away," declares a boy of nine; while a girl of eleven "would put him in jail for ten years, and after that hanged him." A boy of thirteen would "give him five years in jail and give him bread and water to eat, and Sundays put him in with a lion and give him a sword to fight with." Penalties are assigned as individual caprice may dic-

tate, with little thought of the law. The character of the punishments imposed is in direct line with the conclusions reached in previous studies made by this department.¹ Usually severe, and often accompanied by most ingenious tortures, they certainly grow out of the idea of revenge.

CHART SHOWING CHILDREN'S REGARD FOR LAW.



As will be found by a reference to the curve, at the age of seven, eighty-nine per cent. of the children ignore the law in assigning their penalties, while only eleven per cent. of them regard it. That is to say, nearly nine-tenths of the children would punish the criminal by some penalty other than that fixed by law, while one-tenth would imprison him for five years according to the law. Our curve shows an erratic increase in the number who recognize law to the age of twelve, when twenty-nine per cent. would inflict the legal penalty. From twelve years of age there is a steady advance, until at sixteen seventy-four per cent. of the children accept the law, and suggest punishing the criminal in accordance with its provisions.

It is evident that the tendency to observe law increases with age. This tendency may be interpreted in one of two ways. We

¹ *A Study of Children's Rights as Seen by Themselves.* By Margaret Schallenger. Pedagogical Seminary, October, 1894.

Punishment, as Seen by Children. By Earl Barnes. Pedagogical Seminary, October, 1895.

may say that young children are merely unconscious of the binding force of law, or we may say that they are naturally anarchists, in the popular acceptance of the term. Mr. James Sully reaches the latter conclusion. Alluding to data gathered from individual children, he says: "This seems to show that a child objects not only to the particular administration under which he happens to live, but to all law, as implying restraints on free action."¹ If we think of the child as repeating the development of the race, it seems perfectly natural that the instinct of self-preservation and the individualistic tendencies accompanying it should precede the social instinct with its growth and sanction of law. But with the dawn of adolescence, at the age of twelve, or shortly after, comes the recognition of a larger life, a life to be lived in common with others, and with this recognition a desire to sustain the social code made for the common welfare. "One of the distinguishing features of adolescence," says Mr. Wm. H. Burnham, "is that social and ethical impulses become dominant; egoism often gives place to altruism."² Recognizing more fully the social order into which dawning manhood and womanhood have ushered them, the older children respect its code.

Another factor in this transition may be the power of generalization, which, as shown in the *Study of Children's Interests* (page 203), becomes prominent in intellectual life after the age of twelve.

Feelings of partiality are not brought out to any extent by this study. That the second burglar is present in consciousness, is proved by the fact that twenty per cent. of the children mention him, although he was eliminated from the stage of action before sentence had to be passed upon the one who was caught. However, only eight per cent. of the children modify the penalty on his account. In the opinion of two per cent. of the children the criminal should be set free under the circumstances. As a girl of eleven puts it: "I would not have touched the one that was caught till I caught the other one, and if I did not catch him I would let the other one go." His punishment would be made lighter by five per cent. of the children, on account of the second burglar. Says a girl of eleven: "I would have give him half of the time which is two years and a half. Because he only did half of the crime." On the other hand,

¹ *Studies of Childhood*. By James Sully. New York: D. Appleton & Co., 1896.

² *The Study of Adolescence*. By Wm. H. Burnham. Pedagogical Seminary, June, 1891.

one per cent. of the children would make his punishment heavier. A boy of ten says: "I think he should of had double his term, ten years, one-half for him and one-half for the other man."

From this study we can make one safe generalization, important in its bearings upon discipline in school and family. Young children regard punishment as an individual and arbitrary matter, imposed without reference to the social order, while, after the age of twelve, there is a steady increase in the regard for law, three-fourths of the children of sixteen appreciating its binding force.

Though the test is not adapted to bring out strongly feelings of partiality, we seem justified in concluding that they play a small part in children's judgments.

Applying the results of our study to pedagogy, we must decide that since the majority of young children utterly ignore laws or rules, they should not exist in the discipline of the school or the family. For definite penalties, should be substituted punishments which deal with individual cases on their merits. In applying these punishments we need fear a feeling of partiality on the part of only a few children, whom it should be possible to educate beyond this feeling. Since the age of twelve seems to mark the inauguration of a social consciousness, our higher grammar grades should begin to call the attention of children to the most prominent facts of social and civic life.

Recognizing the fact that this study was not sufficiently close to the life of the child, we have sent out the following supplementary test, with the hope that it may throw more light upon children's attitude toward law, and may also bring out sex-differences, which showed to no perceptible degree in the present study. Its results will be reviewed in the next number of the *Studies*.

Two boys were fighting on the school grounds when the teacher came along. The rule was that any one fighting should lose his recesses for a month. One boy ran home and did not return. What would you have done with the other boy?

STUDY IN REMINISCENCE.

VI. CHILDREN'S INTEREST IN PLANTS.

KATHERINE A. CHANDLER.

This little study was undertaken in the hope of discovering how children really feel toward plants. This is the age of reminiscent writing; so, to gather materials for the study, the following syllabus was sent out to adults:

What are the first memories you have connected with plants, their cultivation, the picking of flowers, the using of flowers for decoration, and so forth?

As a little child, had you any feeling of discomfort when picking plants? Did you feel that they were alive and might be hurt? Any special instances of morbid sensitiveness will be interesting.

As a child, did you have to work in the garden or on a farm? Did this in any way affect your feeling for plants and plant-life? If so, how?

Did you ever care to gather seeds? Give concrete instances.

Did you ever have any direct instruction concerning plants, or, as a child, did you read any books about them? Did you dissect plants for study? Can you remember what effect formulated study had upon your feeling for plants and plant-life?

Had you any superstitions connected with plants? What were they? Were they any tricks that could be performed with flowers or plants? If so, describe them.

These questions are simply suggestive; anything connected with your early feelings concerning plants and flowers will be helpful to us.

In answer to this outline, 103 papers were received from Stanford University students, and forty-seven from teachers and other persons in different parts of California.

By far the greater number of papers notice the flower only; those that mention the whole plant refer to trees or to those vegetables that yield food products. This agrees with the facts as we find them in our own minds. The word "lilac" brings a mental image of the fragrant blossoms; "lettuce" pictures the esculent leaves; and so on, according to our relation to the plant.

The papers were collated under the headings: Beauty of

flower, fragrance, size, form, rarity, personality of the flower, love and reverence for the plant, superstition concerning plants, social feeling, association with people or places, use for decoration, use for toys or tricks, the collection of seed, use for sweetmeats, use to sell, pleasure of picking, unhappiness in picking, opposition to destroying or dissecting flowers, pleasure in dissection, effects of instruction or cultivation, and indifference.

Beauty covered delicacy, color, etc.; but the number sixty-seven, or forty-four and two-thirds per cent., is hardly just to the papers, as many who do not refer to beauty in words show a feeling of admiration.

Fragrance, mentioned by twenty-four, or sixteen per cent., created pleasurable sensations, save in three instances. The odor of the yellow lupine caused nausea; the musk had a like effect; and the rose geranium brought the feeling connected with death.

Size and form made little impression on the child's mind; eleven, or seven and one-third per cent., noticing the former, and three, or two per cent., the latter.

Rarity, alluded to by thirty-three, or twenty-two per cent., included not only flowers seldom seen, but also those that were sought for as harbingers of spring.

Personality, embracing all cases where human characteristics were attributed to plants, appeared in forty-one or twenty-seven and one-third per cent., of the papers. "The most sensitive point with me," writes a girl, "concerned their withering and death. It seemed as if they suffered; and repeatedly I rescued flowers from trash-barrels, coal-hods, and dirt-heaps, and carried them to the plant from which they were cut and tucked them behind or under the shrubbery, or among the foliage, always thinking that they were no more lonely and would die at home comfortably. I picked up withered flowers from the sidewalks and carried them to a weed-patch." This feeling that friendliness exists between the parts of a plant is also seen in the following: "When picking blackberries, I would never quite empty the pail in the house, but would take some back to the bush to tell the others about the house they had seen." One doubter became convinced of the plants' inner life when the blossoms of the "night-blooming cereus quivered as ants crawled in them."

Love and reverence indicate a more exalted affection than mere fondness, and was evinced by thirty-three writers, or twenty-two per cent. In his reminiscences Pierre Loti continually displays this warm regard.¹

In our papers forty-one, or twenty-seven and one-third per cent., recollect having had superstitious beliefs regarding plants. Most children question the buttercup to see "if they love butter," or "are jealous." The daisy is a famous oracle; "He loves me, loves me not," satisfies or disturbs the heart; "Rich man, poor man," anticipates one's own position in manhood, or that of one's husband. "Hell, heaven, purgatory," settles one's existence in the next world. One's veracity is tested by the center of the calla being crumbled on the back of the hand, and the hand slapped suddenly upward. The number of flakes remaining indicates "the number of lies told." One knew "toadstools as 'Devil's breath.' We would go blocks out of our way to avoid passing them, as we were sure something dreadful would occur. We never knew the nature of that something, for we had never seen anything happen, but we kept on the safe side. They were supposed to jump up in an instant when no one was looking. Therefore we were in constant fear of their jumping up around us, and would take great delight in frightening one another by 'O, look! There's some Devil's breath.'"

Under the social spirit were gathered those who professed an interest in flowers because their parents or friends had such an interest; those who liked to present their teachers with bouquets, etc. Forty-four, or twenty-nine and one-third per cent., speak of this inclination.

Association embraces such records as: "I gathered and pressed flowers in memory of places." "The honeysuckle was connected with a romance in which figured a cottage covered with it." "I cared for a certain flower because its appearance told me Easter was near. Another I never liked because every year a large yellow spider of a certain species made its appearance on its leaves." "Certain odors were associated with different things, and even to this day violets are connected with thoughts of death, because I recollect smelling violets first at a funeral." Twenty-two, or fourteen and two-thirds per cent., recall these associations.

¹ *Romance of a Child.* By Pierre Loti. Rand, McNally & Co., Chicago.

Forty-nine, or thirty-two and two-thirds per cent., mention having used flowers or leaves or fruit for decorative purposes. Decoration blends more or less with the use as toys, noticed by seventy-four, or forty-nine and one-third per cent. Chestnut and maple leaves, pinned together with thorns, made most artistic gowns and bonnets; while "earrings of fuchsias and snapdragons" and "magnolia stamen watches" added to the stylish costume. Curls of dandelion-stems, split and soaked in water, were a better substitute for nature's ringlets than the city child's "shavings." Pansies, fuchsias, four-o'clocks, petunias and morning-glories were transformed into fairy babes. Furniture for the dainty folks' houses was made of burdock-burrs and chilicothe-seeds; "vases of canterbury-bells," "clocks of the dry filaria carpels," and "scissors from the green ones." Their pictures were colored with liquids made from roses, petunias, and geraniums, using "the periwinkle center as a paint-brush."

The difference between boys' and girls' favorite games is illustrated in their uses of plants. The lads invented many an instrument of noise. We note popguns of elder and whistles of willow, hickory, butternut, barley-stalks, and dandelion-stems. "Rose and poppy petals were popped on the hand," and "grass-blades stretched between."

Twenty-seven, or eighteen per cent., made their seed collections with the intention of planting the following year, but many admit that they never effected their purpose.

Use as sweetmeats is given by only thirteen, or eight and two-thirds per cent. Rose-petals, "sour grass," and seeds were frequently eaten, with the nectar of the honeysuckle and verbenas to satisfy the sweeter tooth. "We gathered verbenas, put a little sugar on them, wrapped them in paper, and buried them in the ground, marking the place with a stick. Later we went the rounds and ate them up. It was a very delicate and 'exciting' dish — a jumble of sticky sweetness."¹

The number of financiers is few, only eight, or five and one-third per cent. Selling bouquets or vegetables brought in actual returns, but "catnip" and "peach-stones" were gathered to amass a fortune that proved visionary.

¹ A delightful article on these aspects of the subject is Alice Morse Earle's *Flower Lore of New England Children*, in the *Atlantic Monthly*, for April, 1895.

Eighty-three, or fifty-three and one-third per cent. of the papers recognize the delight that most children find in picking flowers. Pierre Loti's feelings seem typical of a child's attitude. "I pulled them, and pulled more, not knowing which to run to . . . longing to pluck handfuls and carry all away. One of our writers gives the following reason for her picking: "I believed every flower had a soul, and if I, or any human being, picked it, it would go to heaven. If it was not picked, it would have to go on blooming, and not get to heaven until it was picked. I imagined the flowers felt very badly if I went by without picking them, and it made me sad to think I could not pick them all."

Those opposed to picking generally reasoned that it hurt the plant to lose its parts. One, when pruning was being done, "would cry and beg them not to cut off the whole year's growth of the tree." This question of the plant's sensitiveness seems to enter the mind as the years increase. The young child generally does not feel it.

Thirty-five, or twenty-three and one-third per cent., felt strongly against destroying a flower needlessly, as stepping on it, or pulling it aimlessly to pieces. Some few even objected to dissecting it for study, but this feeling seems to fade as one becomes interested in science.

Six, or four per cent., liked to study by dissecting.

Of those who received instruction, thirty-eight, or twenty-five and one-third per cent., state that it increased their interest in plants; five, or three and one-third per cent., believe that it did not affect their feelings; and four, or two and two-thirds per cent., declare that it aroused an aversion toward the whole vegetable kingdom. To one boy, the subject of botany "seemed all hard names." A girl studied with her governess "the leaves, their shapes, margins, and veins until I fairly hated them, and it set me against the study of botany forever."

Many children had gardens of their own, in which they planted seed, generally expecting it to grow immediately, and digging it up frequently to inquire why it came so slowly. As a rule, these gardens were cultivated spasmodically, but some speak of having taken a pride in keeping their gardens always in good condition.

A number lived on farms, and were required to help in cultivation. Thirty-nine, or twenty-six per cent., believed that their labor increased their interest in plant-life; five, or three and one-third per

cent., noticed no effect; and three, or two per cent., thought that it made them dislike plants. The antagonism was mainly directed toward those plants commonly known as "weeds," and was aroused by being obliged to uproot so many of the invaders. Some had superstitions regarding these plants that thrived so much better than their more prized fellows. "In some way, I got the idea that weeds and insects were put on earth to punish Pharaoh for his meanness. For this reason, to pull a weed was to give the Devil a backhanded slap."

Indifference explains itself: eight, or five and one-third per cent., acknowledge this state of mind.

Conclusions seem to indicate that children *are* interested in plant-life. If, in schools, they have appeared otherwise, the teaching was at fault somewhere. Perhaps we have frightened them with scientific names, or have bored them with exercises, "long drawn out" upon the separate parts, as "The Leaf—its margin, form, etc.," not recognizing the fact that it is the "use" or the "action" that appeals most to the child.

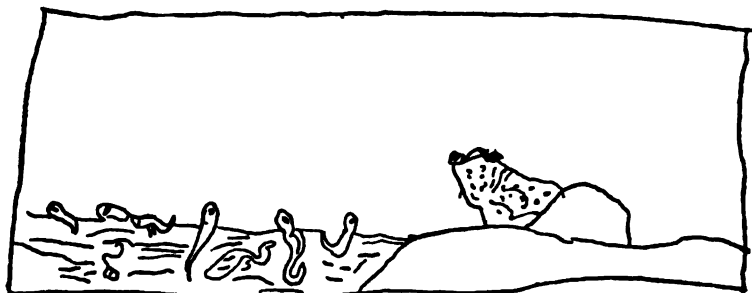
I suspect that, if we have growing plants, and encourage the child to observe the uses, actions, and relations of the parts, we shall soon perceive that we have found one of the "natural interests" of childhood.

POLLIWOGS AND FROGS.

A BOOK IN ELEVEN PAGES MADE BY A BOY SEVEN YEARS OLD.

A BIG BOOK-
EATING AND LIVING.

THEY EAT BREAD, AND MUD
THEY LIVE IN MUD-PUDDLES,
VERY DIRTY- THEY TURN INTO
FROGS IF THEY LIVE LONG
ENOUGH



1.

THE BOOK.

THE POLYWOGS COLOR

THE POLYWOGS COLOR IS BROWNISH AND YELLOWISH
THEY HAVE A FACE ON THEIR BACK IT IS LIKE A MANS
FACE IT IS INTERESTING TO LOOK AT.

2.

THE BOOK

DOINGS OF THEM

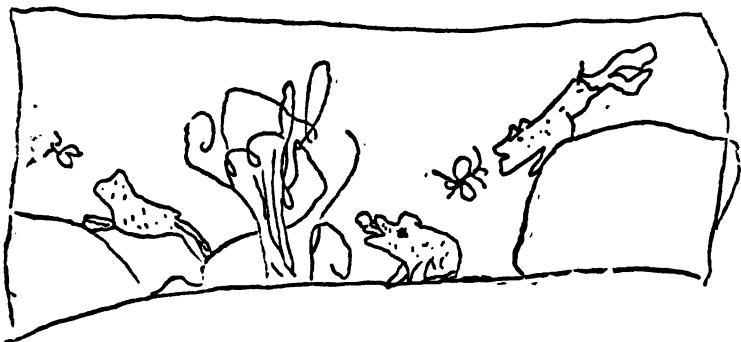
THEY WILL CIME TO THE TOP OF THE WATER AND LET
LITTLE BUBBLES COME OUT. THEN THEY ARE BREATHING.
THEY STEER THEMSELVES WITH THEIR TAILS WHEN THEY
SWIM

3.

A BIG BOOK.

EATING AND LIVING.

THEY EAT BREAD, AND MUD. THEY LIVE IN MUD-PUDDLES,
VERY DIRTY. THEY TURN INTO FROGS IF THEY LIVE LONG
ENOUGH



4.

SIZES

HOW TO KEEP THEM

GO TO A MUD-PUDDLE AND TAKE A CAN WITH YOU, TAKE A HAND FULLOUT. AFTER REACHING HOME CUT THE TOP OF A CAN OFF AND PUT THEM IN IT AND LEAVE THEM OVER NIGHT. PUT TWO NICE SQUARE PIECES OF WOOD IN AND IT IS FIXED. DO CHANGE THE WATER EVERY FEW DAYS PUT MUD IN THE BOTTOM.

5.

SIZES.

FIRST THEY ARE A MASS OF JELLY ON A STICK WITH BLACK THINGS IN IT. THOSE ARE THE EGGS AND WILL BE LITTLE BLACK THINGS WITH SMALL TAILS WHEN THEY HATCH

6.

THINGS I HAVE NOT TOLD BEFORE.

THEY ARE A LITTLE FROG INSIDE OF A WHITE COVERING WITH A TAIL ON PRETTY SOON IT BREAKS AND THEY COME OUT A LITTLE FROG. SOME FROGS ARE WHITE. THEY ALL HAVE SOME SPECKS ON THEM OF COLORS.

7.

THE ENDING OF THE POLYWOGS IS HERE.

THE FROGS BODY.

THIS IS THE MIDDLE OF THE BOOK THE NEXT PAGE WILL BE ABOUT FROGS. AS THE POLYWOGS TURN THEIR TAILS SHORTEN. WHEN THEY GET THEIR LEGS ON THEY ARE THE COLOR OF THE FROGS.BODIES. THESE FROGS THAT I HAVE BEEN TALKING A BOUT. ARE BULL FROGS AND THE POLYWOGS ARE BULL POLY WOGS.

8.

SOME POLY WOGS

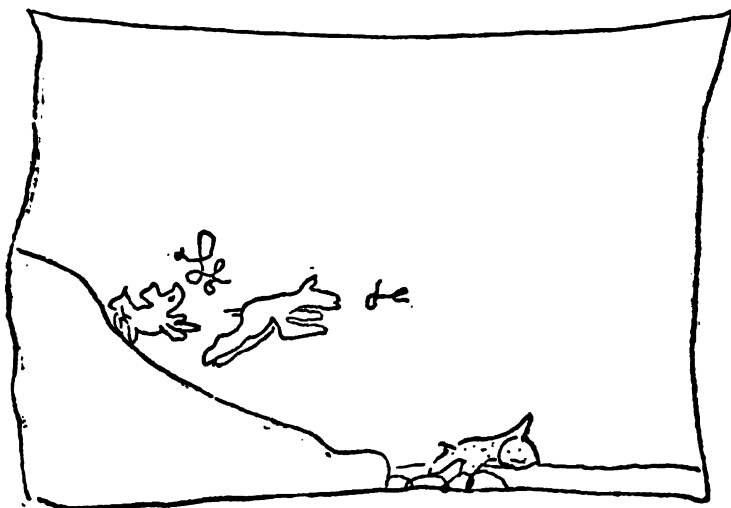
BULL FROGS WAYS AND DOINGS.

IF YOU WANT TO KEEP THEM NICELY PUT SOME DIRT IN ONE END AND WATER IN THE OTHER YOU CAN DIG HOLES IN IT. THEY WILL CRAWL DOWN IN IT TO KEEP WARM OR THEY WILL DIG HOLES IN IT WHAT I MEAN TO PUT THEM IN IS A OIL CAN AND SAW A STICK OFF THE RIGHT LENGTH THEN PUT THE STICK ACROSS TO KEEP IT IN AND THEN THEY WILL BE HAPPY.

9.

WHAT THE FROGS DO.

WHEN YOU PUT THEM IN A CAN—I MEAN AN OIL CAN—THEY WILL STAND ON THEIR HIND LEGS AND PUT THEIR FRONT LEGS UP AND PUT THEIR HEADS UP AND CRAWL UP THE CAN. ABOUT TWO INCHES. THEN IF THEY GET TOO HIGH THEY WILL FALL.



10.

MY FROG

YOU CAN GET FROGS TAME IF YOU ARE GOOD TO THEM I
HAD SOME FROGS I TRIED TO GET THEM TAME I HAD
SOME POLY-WOGS I HAD SO MANY I COULD NOT COUNT
THEM LIKED ME

11.

WHAT THEY DO.

THEY WILL EAT BIG FLIES IF YOU PUT ONE OR TWO
FROGS UP ON A STICK THEY WILL SNAP AT A BIG FLY
THEY LIKE MUD TO EAT

COMMENTARY ON THE PICTURES AND TEXT.

Each of these parts as numbered forms a page in a book made by a boy not quite seven years old, living in Southern California. Our page 223 is an exact reproduction of the boy's page 3. Each of his pages carries an illustration, and we have reproduced two of them. This voluntary work by a child not under school influences seems to me to bear out our study on *Children's Interests* in this number very strongly. The boy's interest in frogs and polliwogs centers in what they can do, and many of these doings are related to his own personality. At first, the author's attention is largely centered upon the book, as seen in the headings, but it is gradually transferred to the subject. The fragmentariness of the work is characteristic of the age; and the selection and arrangement of chapters reminds one of Pliny's *Natural History*. In the pictures, as in the text, there is nothing static; everything is alive. Contrast this product with an ordinary object lesson in an elementary school.

DISCIPLINE AT HOME AND IN THE SCHOOL.

VI. THE REDUCING OF DATA TO NUMERICAL TABLES.

EARL BARNES.

In the last number we arranged a collating sheet and began working up the evidence. The next question to decide is how many papers from each age and sex we shall work over. This depends upon the nature of the test and the multiplication of headings. If the material is such that the data tend to arrange themselves under a very few headings, we need comparatively few papers; this will also be true if most of the data group themselves under a few headings, even though there be a long scattering line of less important ones. In general, from twenty-five to a hundred instances in each of the important groups prove sufficient for a general study. If we classify the materials along lines of age from six to sixteen, we shall need ten times as many papers as though we grouped all ages together. If we separate boys and girls, we must multiply the number of papers by two; if we divide the papers by nationality, and have three leading nationalities, we must multiply the number of papers needed by three. If we try to classify the papers by age, sex, temperament, nationality of father, of mother, of grandparents, etc. hundreds of thousands of papers will be needed to bring the number in each important rubric up to twenty-five or more. Where papers are classified along lines of age and sex, one hundred papers of each sex and age is generally a fair number to use.

Having settled on the number of papers to be collated, we have next to decide how to reduce our numerical results to a common basis. This may be done by collating some fixed number of papers for each age and sex involved. Some ages, however, are almost always deficient in returns. It is easy to get papers written by children from eight to fifteen years old; above and below these

ages it is difficult. How shall we reduce our data where we have collated different numbers of papers for the different ages? To show relations, the data must be reduced to a common basis, of either 100 or 1000 papers. The mind is, however, always prone to interpret figures absolutely, and when a list is reduced to the basis of 1000, while it brings out relations very boldly, it still sometimes gives to slight quantities such large appearances that the mind is disturbed by their presence. The basis of 100, therefore, is commonly employed. It is difficult, however, to determine in many cases on what the percentage shall be reckoned. Take, for instance, the papers we are now working on. Suppose we collect 3000 papers from girls—1200 on just punishment, and 1800 on unjust punishment. Of the papers on unjust punishment, 150 are written by ten-year-old girls, fifty of whom say they have never received an unjust punishment, while 100 describe a punishment, and eighteen of them attribute the injustice to partiality.

Now, eighteen is eighteen per cent. of 100, or twelve per cent. of 150, or one per cent. of 1800, or three-fifths per cent. of 3000. Consequently, we can express existing relations in several different ways, according to the basis we select, for punishments are considered unjust because partiality was shown:

By eighteen per cent. of the ten-year-old girls who describe unjust punishments.

By twelve per cent. of the total number of ten-year-old girls.

By one per cent. of the total number of girls who write on unjust punishment.

By three-fifths per cent. of the total number of girls from whom papers were received.

For purposes of interpretation it will generally be best to take the smaller and more differentiated base—in this case the 100 ten-year-old girls who describe unjust punishment. The one all-important thing, however, is that in describing results we shall state clearly on what the per cent. is reckoned. In the next issue the tables for this study, based on some thousands of papers, will be printed.

MY EDUCATIONAL RECOLLECTIONS.¹

BY HERMANN KRÜSI.

TRANSLATED BY HIS SON, HERMANN KRÜSI.

[Hermann Krüsi, a Swiss of Appenzell, was the first man called to assist Pestalozzi in the practical work of teaching. The following reminiscences are from his pen, and deal with the Burgdorf period of Pestalozzi's experiments. They form part of an address made on an examination-day in the Normal School at Gais, in Appenzell, in 1839.

The translation has been made by Hermann Krüsi, the son, who has had a notable educational career of his own, having been associated with his father in Gais, with the Home and Colonial School in London, with the Normal Schools and Institutes of Massachusetts, and then for a quarter of a century with the Normal and Training School in Oswego, N. Y. He has also made a notable contribution to Pestalozzi literature in his own biography of the great Swiss reformer.²]

I.

At the beginning of my narration, I should like to lead you to the neighboring mountain, Gabris, which affords such a delightful view. At the summit of the pass, where the path from Gais to Trogen changes its direction, my course of life was also changed. Being obliged to earn a living for myself and family as an express messenger,³ I was carrying, on a hot summer day, a heavy load of yarn to the mercantile house of Zellweger, to the members of which I afterward stood in quite different relations. On reaching the summit, I rested a while to wipe off the perspiration from my face, and was joined by a distant relative, the magistrate Gruber. After the customary greetings, the following conversation occurred, which, as the turning-point of my fate, remains yet vividly in memory:

¹ *Erinnerungen aus meinem pädagogischen Leben und Wirken vor meiner Vereinigung mit Pestalozzi, während derselben und seither. Ein Freundeswort an die Seminaristen des dritten Lehrkurses bei ihrer Schulprüfung am 19 August, 1839.* Von Hermann Krüsi, Director des Schullehrer-Seminars in Gais. Stuttgart, 1840.

² *Pestalozzi: His Life, Work, and Influence.* By Hermann Krüsi, A. M. Cincinnati and New York, 1875.

³ This meant long trips on foot, with the load on one's own back.

He. This is truly a hot day.

I. Very hot.

He. As the schoolmaster in the village is going to leave, you might perhaps earn your bread with less hard labor. Would you not like to apply for his position?

I. "Liking" it would not help me. A schoolmaster must know something, and I know nothing.

He. That which a schoolmaster must know in our region, you could at your age easily learn.

I. But how and where? I cannot see any possibility before me.

He. If you are truly anxious for it, there will be some way to do what is necessary. Reflect on what I have said—and we shall see.

Thus he left me with matter enough for thought and reflection, but not a ray of light illuminated the path to the distant goal. . . . Hardly conscious of my load, I descended the uneven steps of the narrow path. . . . Since I had left the day-school, where children were taught nothing but reading, learning by rote, and writing from copies, I had so far forgotten how to write, that I did not know how to make all the letters of the alphabet. Friend Sonderegger therefore borrowed a copy for me from a teacher in Altstätten, famous for his fine writing, and I copied it perhaps a hundred times. . . . This formed nearly my only preparation for the calling of schoolmaster; yet I dared have myself proclaimed from the pulpit as a candidate for the vacant position, little hoping for success, but thinking it would do no harm to try.

The examination day arrived.¹ An older competitor was first called up. To read a chapter in the New Testament and to write a few lines, occupied him fully a quarter of an hour. Then I was called in. The first chapter of the genealogy contained in the Chronicles, from Adam to Abraham, was put before me to read; then the head-man [*Hauptman*] gave me a broken quill-pen, with the direction to mend it and write a few lines. "What shall I write?" I asked. "The Lord's Prayer or anything you like," was the answer. As I had no knowledge of orthography, nor the parts of speech, you can imagine the results of my scribbling. Enough, I could retire. After a short consultation, to my astonishment and joy,

¹ The examination was held by the supervisors (*Rathsherren*) of the Commune, in their assembly-room, which was in the basement of the parsonage, and furnished with benches around the walls.

I was called again into the room. The head-man [*Hauptman*] then announced to me that the counselors had found that both aspirants knew very little; my competitor had done better in reading, and I in writing. But considering that the former was already forty years old, while I was barely eighteen, they were of the opinion, that I might acquire the necessary knowledge sooner than he; and in further consideration that my dwelling was better calculated than his for a school—the village had no schoolhouse of its own at that time—I was appointed schoolmaster. . . . It is worthy of notice that my competitor, eight days later, obtained the office of policeman, at three gulden a week, while the schoolmaster, who used his own house to boot for the school, must be content with two and a half gulden per week. . . .

Being without any special preparation for my task, . . . you can imagine how much I appreciated the helping hand given me by Pastor Schiess. . . . In the beginning, he himself generally conducted the school for me, and enlightened my inexperience about the best way to treat the subjects as well as the children. Such assistance at such a time—how much it meant! As long as my heart beats shall I gratefully remember the noble man who gave it. Even in his religious instruction, he led the children in an unusual degree to think for themselves. The value of this teaching became very apparent to me. Even in the first summer, the number of my pupils rose to more than a hundred. This was partly due to the fact that the free school only lasted in the summer months, and partly to the special pains which the pastor gave us. With his help I divided the pupils into classes, and learned how to work with them in groups. This division into classes gave my school a certain reputation, since in the other schools each of the pupils had his own individual task, or none at all—which often happened, since by this individual plan the teacher could give each pupil only a few minutes—perhaps a few seconds. With the division into classes, we also ended the noisy confusion of each pupil's learning his lessons by rote out loud.

Meanwhile their copy-books procured for my pupils and myself

¹ By the present standard, about \$1.50, but at that time worth two or three times as much.

a gratifying triumph on the so-called Easter Monday.¹ The "numbering of the copies" had at that time an unusual importance, and roused the highest strife, not only among the pupils of each school, but among the schools themselves. . . . The assigning of number one to any school was a great event, and for a time that school was reckoned the best. In this contest, the high honor fell to me, that not only number one was credited to my school, but all the *first six consecutive* numbers. This was an unheard-of occurrence, and when the result was announced on Holy Friday in the church, there was high glee manifested on the faces of my pupils and their parents, but also deep gloom and envy on the part of those whose names were omitted in the roll of honor. . . .

A further assistance given me by my pastor was this: that he procured for me the writings of authors who at that time enjoyed a deserved reputation,—namely those of Salzmann, Rochow, Campe, Büel, etc. Rochow's *Kinderfreund* appeared to me particularly a model school-book for the people, on account of its simple style, its practical contents, and its moral and religious character. This simple little book long remained to me the living source from which I derived much instruction as well as much encouragement to rely on my own observation and investigation. I was² especially charmed with that which was calculated to lead myself and my pupils to an appreciation of the works of creation, and to the ruling of divine power, wisdom, and love in nature and history. . . . My tribute of heartfelt gratitude for assistance given to the struggling young schoolmaster is not only due to Pastor Schiess, but to his successors, Ludwig and Steinmüller. In proportion as I got acquainted with language, I tried to make my children acquainted with the parts of speech and a few simple rules of orthography, and to make them understand the meaning of the contents of their reading exercises. I also introduced exercises of dictation and instruction in Bible history. . . . Encouraged by my success, I ventured to make application for an increase of salary, which was supported by

¹ Some time before that day each pupil was required to do his best in writing a copy, intended for exhibition. When all the schools had presented their quota to an impartial authority,—i. e. a committee of the town council—all the copies were mixed together, and numbered according to their merits.

This plan possessed one bad feature, which stands distinctly in my recollection; namely, that the possessors of copies favorably marked, went from house to house, and received a piece of money from admiring friends and relatives, especially from the wealthier ones. It is presumable that the one who had the lowest mark, and who for this reason was called the "pig," although he might intellectually have been a budding genius, did not present his copy, but hid his head in shame.

Steinmüller's testimony, that my school belonged to the best in our canton. In spite of this, I was deeply aware of the imperfections in my work, and secretly harbored the wish that Providence might show me means and ways by which to prepare myself better for a vocation which I had learned to cherish more and more.

My ardent wish was satisfied, . . . precisely under circumstances where I could the least expect it. The year 1799 was for our particular region a disastrous year. Foreign armies marched through the land, and were encamped along the Rhine and elsewhere. Scarcity of food, stagnation of trade, and other evils increased to an almost intolerable degree; philanthropic men in western Switzerland took to heart the distress of their eastern brethren, and tried to alleviate it. One of these men, Fischer from Berne, sent an invitation to his friend Pfarrer Steinmüller, to send him a number of poor children, for whose physical and mental welfare he promised to care. At the same time, he expressed the wish to have a young man endowed with talent and zeal accompany and teach this group of children, who were to be received by some benevolent families of Burgdorf. As soon as Steinmüller made me acquainted with the contents of the letter, an inner voice admonished me not to let pass such an opportunity. Steinmüller approved my decision and thus the matter was closed.¹

Twenty-six children of both sexes were reported ready to emigrate. The council of the village [*Gemeinderath*] appointed me as their leader, and also engaged a driver, whose covered wagon was to help along the weaker or more tired children, while the rest were to walk. With recommendations from Pfarrer Steinmüller and Statthalter Heim, we started from the pastor's house in

¹In reply to Fischer's inquiry for an efficient young man, Steinmüller wrote:—"A few words about this young man [Krüsi], who promises to be a good teacher. He is twenty-four years of age, and has no property except what he earns by his work. He is active and docile, and has some experience in teaching, which he loves and wherein he will succeed beyond mediocrity. His moral character is excellent. He is well disposed toward the present [*i. e.* the Helvetic] constitution, since he expects from the present government more effort in regard to progress and science than from the former. This young man is delighted at the prospect of being near you, and enjoying Pestalozzi's advice, as well as yours. However sorry I shall be to lose him for the present, I feel that he will be of greater use to you, and that you will find in him a willing assistant in school, and one who will act as your secretary or perform other duties of the household."

²The recommendation of Steinmüller bears the stamp of revolutionary formalism in the attempt to avoid the title "sir" or "gentleman"; but, as we shall see, had the desired effect. It still exists among my father's papers, and reads as follows:—

"Liberty.

Equality.

"Citizen schoolmaster Herrmann Krüsi, from this place, travels with a party of poor children from the Canton Sântis [the changed name for Appenzell] to Berne, in order to conduct them to Burgdorf, where they will be taken care of for some time by benevolent people. Hence my urgent prayer is directed to all municipalities, and more especially to its citizen presidents, to give every assistance to these children, and to see that they get food or night quarters at a cheap rate, or, if possible, without expense. For such kind assistance, may the Father in Heaven bless them!"

JOHANN RUDOLPH STEINMÜLLER, Pfarrer.

"20 Jan. 1800. Gais."

January of 1800. It was a memorable exodus, never before witnessed in the annals of the place. I leave you to imagine the tears that were shed by parents and friends as well as by the departing children, and the blessings which were invoked upon us. To defray the expenses for the whole party on a trip of one hundred and twenty miles [involving nearly six days of travel], the *Gemeinderath* gave me a purse containing twenty-four thalers [about thirty dollars, but worth more then]. The wagoner was to provide for himself and horses.

Wherever we went, curiosity and sympathy were shown. At Flawyl, where we arrived the first evening, we were freely lodged, and at our departure in the morning, friendly gifts were bestowed by the villagers. At Winterthur, while we were resting in the hospital, the philanthropic Pastor Hanhart, after we had told him of the aim of our journey, hastily left us, but soon returned with some thalers and other coins, which he had collected on the impulse of the moment, and which he gave me for our assistance.

At Zurich, which appeared to us rural wanderers as an immense city, I looked with a kind of worshiping veneration on the noble Lavater, with whose songs, prayers, and writings for children I had been previously acquainted. The next stop was at Baden, where we were hospitably received in the "baths" [hotels] of the city.

On the sixth day of our journey we arrived in Burgdorf. Those who had promised to receive children soon came to the town hall, in order to select them and take them home. As for me, I followed Mr. Fischer, who told me that I would lodge in his house, and get board in another. You can imagine with what feelings I entered my room. Foremost in my heart were thanks to God for the prosperous journey, and thanks to the noble benefactors met everywhere on the road, who had enriched me to such an extent, that I could not only return to the *Gemeinderath* the money they had furnished me, but fifteen thalers over and above, which they allowed me to keep for my own immediate necessities. Not only thanks, but hope and courage, filled my heart since the reception accorded me by Fischer, who had come to meet us with Pestalozzi, Stadthalter Schnell, and Dr. Grimm; while the friendly disposition of other citizens of the place convinced me that it was good to live among such men, and that I should find here something for my life's aim, for which I had hitherto searched in vain.

Such memories and experiences have appeared in my life like shining stars. Yet it was dire need which had torn us from our homes and our beloved ones. Although the tearing of these bonds is painful, yet necessity is the soil from which springs much that is noble and good; that, dear sons, is God's method.

I propose first to give you an idea of the four men mentioned above. I came to Burgdorf in the belief that it was *Fischer*, of whom I was to receive directions in the art of instruction and education. For it was to him I was sent, and not to Pestalozzi, whose name I first heard in Burgdorf.

Fischer was only the medium to lead me to Pestalozzi. He had been called to Burgdorf to organize its schools afresh. Besides this, he harbored a comprehensive plan of founding a normal school in connection with Steinmüller, Büel, and others. . . . But since new obstacles constantly opposed his plans, Fischer returned to Berne, to Stapfer, then Minister of Sciences, in order to await there better times and circumstances.

Only a few months could I enjoy his instructive influence. He assigned to the emigrant children a schoolroom, and to me their instruction. It was at his home that I became acquainted with Pestalozzi, who often visited him, discussing with him educational or patriotic subjects. His departure gave me the deepest pain, since in him I had found a man of deep insight and noble aim. It gave me heartfelt pleasure to walk to Berne on Sundays [the walk to Berne and back could not have been less than twenty-four miles], to share with him my week's experiences, and get his advice and counsel. But even this enjoyment was of short duration, for he was attacked by a violent fever, which led to his death. I received the first news of this sad event from Pestalozzi, who at the same time coupled with it the friendly offer that I should now unite my school with his.

But you will ask, Where was his school?

Burgdorf would not, at that time, have confided a single child to the care of a man to whom afterwards flocked hundreds of pupils, and men from all countries of Europe. He was only allowed to experiment in a sort of children's nursery, kept by a woman [*Lehrgotten schule*]. And yet the school authorities of Burgdorf, from their standpoint, acted quite in accordance with common sense. Pestalozzi would undoubtedly have failed in any ordinary

examination given to candidates for schools. His pronunciation was hard and not very distinct, his handwriting so illegible that even expert readers could not decipher it, his orthography either obsolete or faulty; nor did he trouble himself with the laws of punctuation. . . . In regard to arithmetic, he was acquainted with the common operations, but a compound multiplication or division would probably have been too much for him. He had never in his life tried to solve a geometrical problem, nor to attempt any task in drawing. He was indeed fond of minerals, plants, and other natural productions; but he collected them like a child, more for their striking peculiarities, than to become acquainted with their scientific characters. As little was singing his forte; only in rare moments of pleasurable abstraction he hummed—in ever-varying melody—his favorite tune: “Sweet, holy Nature, let me follow thy steps;—when I am tired, let me fall on thy bosom.” Now, say yourselves how this man would have stood an examination! And yet this very man has, to use his own forcible expression, “*Wheeled around the European school-wagon, and rolled it on a new track.*”

Without any office, feebly supported by the Helvetic government with the paltry sum of four hundred [Swiss] francs for the continuation of his experiments, indefatigably occupied, now at the *Lehrgotten schule*, now with the emigrant children from Catholic Einsiedeln, and now with one private pupil—thus did I find him. After the demise of Fischer, he asked permission from the Helvetic government to unite our schools in the castle, which stood vacant at that time.

The permission was willingly granted. In this partnership, I had some advantage, on account of my six years’ experience in teaching and my method of classifying children for the sake of simultaneous instruction. Pestalozzi gladly allowed me my pleasure in this direction, being conscious that my systematic ways supplied a lack on his part. I, on my part, was filled with admiration for his views and endeavors, and felt strong and happy in the possession of his confidence and love, although I could not in many respects quite agree with his manner of teaching; for instance, he had splendid lungs, and he who did not have such could hardly imitate him in his incessant loud speaking or shouting. Even in his case I could have wished that he and his pupils might use their voices with more

moderation and gentleness. There were other points in teaching upon which we could never quite agree. Thus, for instance, he would conduct two exercises at the same time—perhaps exercises in language with those of writing or drawing. I, on the other hand, wished to see an undivided attention given to one alone, as far more calculated to clear conception of each subject. Such little differences, far from disturbing our harmony, did but serve to bring the truth more clearly to light and to show the advantage or disadvantage of this or that method of teaching.

Thus our united school assumed more and more a satisfactory condition ; and I may be allowed to say that Pestalozzi rejoiced in having at last found an assistant who was able to appreciate his views and put them into practice. In his former undertakings he had been without such assistance, so that, in spite of his great enthusiasm and vitality, he could but be deeply discouraged at times by the chasm existing between the vastness of his plans and the insufficiency of his means. The cheerfulness and eager zeal to learn displayed by our children soon attracted attention to our school.

Its most enthusiastic patrons were the aforementioned Stadthalter Schnell and Dr. Grimm, whose judgment had much weight with the public, and did not fail to procure children for the school from the middle and upper classes. This success gave Pestalozzi courage to escape the limitations of a common school and to found a "private institute."

But for this he required new assistants, to whom in his poverty he was not able to make any brilliant offer. He especially needed a teacher for drawing and music, since neither of us had any skill in these directions. Summer vacation was just at hand, and I felt a strong impulse to confide our situation and wants to some friend ; and since none lived nearer than the noble Tobler [an Appenzeller], who at that time was studying theology at Basel, and at the same time acting as tutor in a private family, I determined to make the journey thither. With the ardent enthusiasm peculiar to him, Tobler listened to all that I could tell him of our school and of Pestalozzi. He already knew Pestalozzi by his writings, and had long regarded him with the deepest reverence and love. All this kindled in him a desire to live with this man, and, united with him, to work according to his ideas. For our second need [music and drawing], he suggested to me a young man who was engaged in

the workshop of a bookbinder, and of whose character he had a favorable opinion, and who, he assured me, played with spirit on the flute, and often beguiled his leisure hours with drawing. This young man was Buss, of Tübingen, who upon the first hint hurried to Pestalozzi, without asking for salary or making other conditions. As for Tobler, the prospect of becoming Pestalozzi's coadjutor in his noble endeavors gave him no rest until, accepting Pestalozzi's invitation, he could join the latter at Burgdorf. . . .

That which especially attracted Tobler in Pestalozzi's work was his endeavor to give to the mothers the ability to be the first teachers of infancy, through the agency of love and wisdom, a task which the Creator has undoubtedly intrusted to them.

And then our union consisted of four members, oddly mixed and thrown together by a singular chain of circumstance: first, of its founder, who to his reputation as a successful author joined the reputation of being a man of visionary, impractical tendencies; and of three young men—one a private tutor, who, after a neglected youth, was suddenly thrown into gymnasial and university studies, and had tried many educational experiments without attaining the results promised by his warm heart and lively imagination; a bookbinder, who, in his leisure hours, tried to satisfy his "hobbies" by practicing music and drawing; and, finally, of a village school-master, who had attended to his vocation as well as it was possible without any preparation. Any one who at that time had viewed this singular combination and reflected that neither Pestalozzi nor his assistants had any fixed home nor income, might have been excused for predicting but a short life to the school. And yet it thrived.

(To be continued.)

AGNES SINCLAIR HOLBROOK.

Much of whatever is good in these *Studies* is due to the artistic sense, the literary taste, and the sound judgment of Agnes Sinclair Holbrook. From the time that the *Studies* were first planned, she was constant in her suggestion and helpful criticism; and her articles bear evidence of her continued helpfulness.

Miss Holbrook was born in Marengo, Iowa, October 25, 1867. After a year in Iowa University, she entered Wellesley in the class of '90. At the end of her sophomore year, she went abroad for two years' travel, mainly in France and Germany, and, returning, graduated from Wellesley in the class of '92. After graduating, she went to Chicago, where she became identified with the University Settlement work at Hull House. She remained there, carrying on some work in Chicago University, until January, 1895, when she came to California and entered Stanford University, graduating from the Department of Education with the Master's degree in January, 1896.

While at Hull House, Miss Holbrook prepared a very extended set of maps, showing the distribution of nationalities and various social and industrial conditions in the Hull House district. She assisted in the preparation of the volume known as *Hull House Maps and Papers*, writing the first chapter of the work and furnishing the maps. She brought to our new fields of inductive pedagogical study a finely trained and critical mind, and with a fairly strong constitution she might have achieved a large reputation in this branch of investigation. In the spring of 1896, Miss Holbrook was appointed to an assistantship in the Department of English in Stanford University; but before the opening of the new college year she was obliged to seek relief for a weak throat in the dryer climate of Arizona. This failed her, and she died in her old home in Marengo, Iowa, October 31st. We shall miss her counsel in each of the remaining pages of these *Studies*.

EARL BARNES.

Studies in Education

VII.



STUDIES IN EDUCATION

EDITED BY
EARL BARNES,
Professor of Education in Leland Stanford Junior University.

JANUARY, 1897.

	PAGE.
CHILDREN'S AMBITIONS—Hattie Mason Willard	243
CHILDREN'S ATTITUDE TOWARD LAW—Estelle M. Darrah	254
WHO HAS THE BEST RIGHT?—Genevra Sisson	259
FRAGMENTARY THINKING—Illustrated	264
EPISODES IN THREE LIVES	266
DISCIPLINE: VII—Earl Barnes	270
MY EDUCATIONAL RECOLLECTIONS: II—Hermann Krüsi. Translated by his son, Hermann Krüsi	273

VOL. I.	STANFORD UNIVERSITY.	\$1 a Year.
No. 7.	1897.	15 c. a Copy.

STUDIES IN EDUCATION.

These studies begin with July, 1896. They will be continued as a monthly publication for ten numbers, and will then stop. The last number will contain an index, and a full table of contents. The cost for the year is one dollar, or fifteen cents a number. Address all inquiries or subscriptions to

EARL BARNES,
Stanford University,
California.

Entered at the Post Office in Stanford University as Second-class Mail Matter.

CHILDREN'S AMBITIONS.

HATTIE MASON WILLARD.

This study was begun in November, 1893. The material was obtained through the kindness of the teachers in the San Jose and Santa Rosa public schools, the following story being used as a test:—

"Oh, I have a new game," said Ernest, one Friday morning, as he joined his playmates on the school-ground. His cheeks were flushed and his eyes sparkled with the excitement of an idea entirely his own.

"What is it? What is it?" exclaimed the children, gathering eagerly around him.

Ernest had always been a leader among them. He had already revised several old plays, and invented many new ones.

"Well, listen, and don't interrupt," he continued, "and I will tell you about this new game, which you can all play." The silence that followed showed their deep interest.

"Now," he said, "we are going to build a city. We will lay out the streets, sell the lots, put up stores and houses, start manufactories,—"

"How can we build houses without wood or stone?" chimed in a small boy, who viewed everything from a practical standpoint.

"What we can't get, we will play we have," answered a girl, with a desire to pour oil on troubled waters.

"Who's telling this story?" asked Ernest, in his severest tone. "Do you suppose that I have brought a plan here that I have n't thought out?"

"Go on, go on," cried a chorus of voices; "we will do anything you say. How shall we begin?"

"Are the girls in it, too?" inquired one of the older boys.

"Of course," Ernest replied. "Did n't I tell you you could all play it? Do you remember the vacant lot just back of my house?" The heads nodded. "That is to be our city. Now, each of you think what you want to be, write it on a slip of paper, and hand it to me to-night, after school. To-morrow is Saturday. Meet me as early as you can at the new city."

After his evening's work was done, Ernest took the slips that had been handed him and arranged them in little piles on the table, putting together those that were alike. Such a mixture! Surveyors, railroad-men, policemen, detectives, presidents, car-drivers, bus-drivers, miners, carpenters, shoemakers, agents, clerks, merchants, lumbermen, soldiers, tailors, fishermen, bankers, lawyers, doctors, ministers, photographers, artists, jewelers, dressmakers, milliners, housekeepers, teachers; and one little girl wanted to "make sick people well."

After reading this story, the teachers gave the children paper and pencils, and asked them to write the occupations they would have chosen if they had been present when Ernest proposed the play, and the reason for their choice. At the bottom of the paper was to be placed the name and age of the child, and the occupation of the parents.

We received, in answer to this test, 1234 papers, 617 being written by boys, and the same number by girls. They were collated under the following rubrics:—

1. Occupations chosen.
2. Same occupation as parent.
3. Variety of occupations.
4. Motives for choice.
 - a. Money.
 - b. Philanthropy.

With very few exceptions, the children seemed to enter heartily into the spirit of the story, and to give their honest choice. Some spoke briefly to the point, as, "Banker.—Money." Others gave full explanations, as, "Lawyer.—Naturally, in a new town there are disputes over property, and there have to be lawyers to take up the cases. A lawyer, if he is a good one, can generally get a good share of the property, or enough money to pay up for what he did n't get. New settlers get in rows and kill, and the guilty party, if you defend him you will get well paid. If you free him, you get a good reputation, and have more cases to take when the city grows up; and, consequently, you get more money, reputation, and higher offices in the city, when you can get still more richer."

Of the 144 different occupations mentioned, more than two-thirds were given by the boys alone. Mr. J. P. Taylor, in his study on New York children,¹ found this proportion to be more than three-fourths.

Only the ten leading occupations are recorded here. (Chart I.) The favorite with the boys is "engineer," and leads at ten, twelve, thirteen, and sixteen. In almost every instance, this choice is made independently of the parent's occupation. Many motives play a part in this selection, among which are found "love of travel," "money," and "love for the work."

¹ *A Preliminary Study of Children's Hopes.* J. P. Taylor. In Annual Report of the State Superintendent of Public Instruction for the State of New York. 1895-96.

CHART I.—OCCUPATIONS.

Boys.

DIRECT QUESTION.	San Jose.	Santa Cruz.	San Diego.	Detroit.	Napa City.	Murphy, N. C.	Grenville.	Total.	Ernest Story.	Total.
<i>Number of papers</i> . . .	313	163	39	37	17	14	8	591	617	1208
Engineer	44	20	8	2	3	3	..	80	68	148
Farmer	25	9	3	..	..	4	3	44	28	72
Carpenter	21	9	4	2	3	1	..	40	42	82
Doctor	21	11	..	1	1	1	..	35	37	72
Lawyer	20	7	2	..	2	3	..	34	46	80
Blacksmith	20	7	1	1	..	..	1	30	16	46
Storekeeper	9	12	3	..	..	..	..	24	30	54
Bookkeeper	12	7	2	..	2	..	..	23	11	34
Machinist	7	9	..	1	..	..	..	17	..	17
Clerk	6	6	1	3	..	..	..	16	10	26

CHART II.—OCCUPATIONS.

GIRLS.

DIRECT QUESTION.	San Jose.	Santa Cruz.	San Diego.	Detroit.	Napa City.	Notre Dame School.	Murphy, N. C.	Grenville.	Total.	Ernest Story.	Total.
<i>Number of papers</i> . . .	344	169	48	34	26	18	11	3	653	617	1270
Teacher	137	79	17	5	11	5	7	..	261	190	451
Dressmaker	57	32	4	11	2	11	4	1	122	119	241
Music teacher	34	15	7	8	5	..	..	..	69	39	108
Milliner	35	13	4	3	3	..	..	..	58	99	157
Musician	15	1	3	..	..	..	..	..	19	11	30
Artist	5	5	5	..	2	..	..	..	17	27	44
Clerk	11	1	1	2	1	..	..	..	16	11	27
Housekeeper	9	2	2	..	1	1	..	..	15	23	38
Bookkeeper	9	1	1	..	..	..	..	..	11	16	27
Typewriter	5	3	..	2	..	..	..	..	10	6	16

"Teacher" is the most popular occupation with the girls. (Chart II.) It leads at every age except thirteen and fourteen; at thirteen it is displaced by "dressmaker" and "milliner"; at fourteen, it shares equally with "dressmaker." Mr. Taylor finds thirteen the only age at which "teacher" does not lead, "dressmaker" being then more prominent. The ruling motive for teaching is the love for children.

The most potent motive with the boys is money. (Chart III.) This is true at every age except fourteen and sixteen, when "like it" governs. With the girls, money holds the second place. (Chart IV.) Their choice is influenced by "like it," after eight and nine; at those ages money leads.

The greatest number of those who choose the parent's occupation is found at thirteen, the age when so many boys leave school. (Chart V.) From that age there is a steady increase in independent choice. After fourteen, the age at which the girls' choice of the parental occupation reaches its maximum, their line follows closely that of the boys, coinciding with it at sixteen.

The question arose at this point of the study as to how far the child had been influenced by the story. Their thoughts had been turned to the building of a city, and, although the list of occupations had been full and varied, and many were given by the children that were not mentioned in the story, yet some might have caught at a trade or profession as it was read, and, without further thought, have given it as their choice. So a different test was made. This time the direct question was asked: What do you wish to be when grown? Why? Give name and age. The parent's occupation was not asked, fearing that it might be suggestive.

For these data thanks are due to the teachers of the San Jose, Santa Cruz, San Diego, Napa, Detroit, and Murphy (N. C.) public schools, the Notre Dame Institute of San Jose, a Catholic school for girls, and the Indian Boarding School of Grenville, Plumas County. The papers from three of these places showed marked characteristics. The convent papers gave the highest showing of philanthropy (fifty per cent.), and the influence of religious training was very striking. "I will do everything for the love of God"; "I hope that our Lord will grant me what I wish to be"; "I hope our Lord will give me a good education," are common expressions. One girl, who wishes to be a dressmaker, closes with: "As I have

CHART III.—MOTIVES.

Boys.

DIRECT QUESTION.	San Jose.	Santa Cruz.	Detroit.	Murphy, N. C.	Total.	Ernest Story.	Total.
<i>Number of papers</i> . . .	313	130	36	14	493	617	1110
Money	73	36	10	3	122	171	293
Like the work	36	15	7	..	58	20	78
Good trade	32	6	6	..	44	39	83
Like it	17	22	2	..	41	107	148
Philanthropy	16	13	2	3	34	27	61
Opportunities for pleasure	28	..	2	..	30	28	58
Easy	16	7	3	..	26	26	52
Travel	11	5	3	3	22	..	22
Demand for work	10	11	..	..	21	14	35
Relative is	14	..	..	..	14	4	18

CHART IV.—MOTIVES.

GIRLS.

DIRECT QUESTION.	San Jose.	Santa Cruz.	San Diego.	Detroit.	Notre Dame School.	Murphy, N. C.	Total.	Ernest Story.	Total.
<i>Number of papers</i> . . .	344	169	48	33	18	11	623	617	1240
Like the work	79	41	9	3	4	3	139	8	147
Money	60	21	4	3	3	2	93	107	200
Like it	31	31	8	3	..	..	73	237	310
Philanthropy	49	16	4	5	9	..	83	34	117
Nice position	38	4	4	3	..	..	49	41	90
Easy	35	12	4	2	2	..	55	23	78
Ability	21	14	1	3	..	..	39	21	60
Love children	21	9	5	1	..	..	36	10	46
Independence	17	8	9	5	..	2	41	6	47
Travel	15	..	..	2	..	2	19	..	19

told what I desire to be when I grow older I hope that all who read my composition will pray that I may be successful." Another noticeable feature was the number of details given. One would like to have "two bay windows and a dressing parlor" for her dressmaking establishment; another was going to buy with the money she made "a nice little cottage and a nice black buggy and a tanned colored horse and a man to take care of it."

The Indian papers, also, showed religious training and attention to detail. This is a fair sample:

"When I grow up I want to be a blacksmith and shoe horses and make wagon and horseshoe and have lots of horses and live happy and go to sunday school and teach some of the boys about god, and I like to have cows turkeys chickens and pig. and I don't want to be a carpenter. I might fall of and break my legs or I might break my neck or I might my arm and I don't want to be merchant. merchant have hard time to sell when people come to buy something."

The Murphy papers were particularly interesting, because so many mentioned their prototype with the occupation. "A teacher like Rousseau"; "an author like Louisa M. Alcott"; "a nurse like Florence Nightingale"; "a teacher like Miss Thomas," are given by the girls; and "an engineer like the one that built the Brooklyn bridge"; "an engineer like Ed Bright"; "a lawyer and great speaker like Crawford"; "a famous man like Vance"; "a President so I could help the people. . . . I would help the farmers but I would not help the fishers as Cleveland has done," are given by the boys. Mr. Taylor found only two girls who spoke of the influence of books.

By turning to Chart I, it will be noticed that there is only a slight difference in the leading occupations, according to either test. The order varies, it is true, but "engineer" leads in both. When it is remembered that totally different sections of the country are represented, this similarity becomes most significant. On account of the slight difference shown between the results of the Ernest story and the direct question, the two are combined, and the result taken as showing the ten leading occupations chosen by the boys. The two tests show also but a slight difference in the choice of girls' occupations. (Chart II.) And the same close resemblance is found in the motives. (Charts III and IV)

If we take the leading occupation from each set of the California public-school papers, the choice is the same,—“engineer” for the boys, “teacher” for the girls; in the motives, “money” leads with the boys, and “like it” or “like the work,” with the girls. Referring to the Stanford catalogue of 1894–95, the five leading majors of the men are—engineering, 187; law, 101; history, 88; economics, 64; physiology, 63. Assuming that the students who choose physiology for their major are preparing for the profession of medicine, three out of the five majors carry out the choice shown in the children’s papers, and in the same order.

Mr. Taylor and Mr. W. S. Monroe¹ find the three leading occupations of the girls to be “teacher,” “dressmaker,” and “milliner,” the same as shown in Chart II, the leading motives, “money” and “like it,” are also supported by Mr. Monroe’s study.

Charts VI–VIII are based upon the data furnished by the tests of the Ernest story and the direct question. The boys at each age choose a far greater variety of occupations than the girls; with each there is a general upward tendency after ten. (Chart VI.)

Except at eight, the money motive is stronger and varies less with the boys than with the girls. Half-way between the maxima shown by the charts at ten and sixteen there is a depression, which reaches its lowest point at thirteen, the age at which philanthropy reaches next to its highest point. The girls’ money line, while more irregular than that of the boys’, follows, from eleven, the same general direction. (Charts VII and VIII.)

Thirteen is the only age at which the boys’ line showing philanthropy crosses that of the girls. The leading profession chosen by the boys from this motive is that of medicine; by the girls, that of teaching. The philanthropic motive is much steadier than the financial one, and less difference is shown between the boys and girls. This steadiness is emphasized by the study made by Mr. Monroe, who finds the same per cent. as these papers give.

Two attempts have been made to test the stability of the child’s choice, and the dependence to be placed upon any selection made during his grammar and high-school course.

The first test was made by reminiscent papers. The following

¹ *Children's Ambitions.* By Will S. Monroe. New England Journal of Education, June 18, 1896.

CHART V.—SAME OCCUPATION AS PARENT.

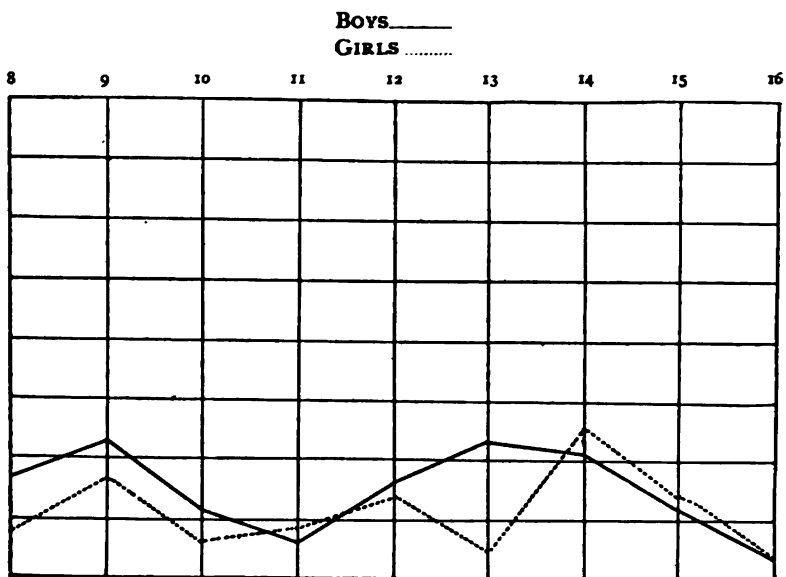


CHART VI.—VARIETY OF OCCUPATIONS.

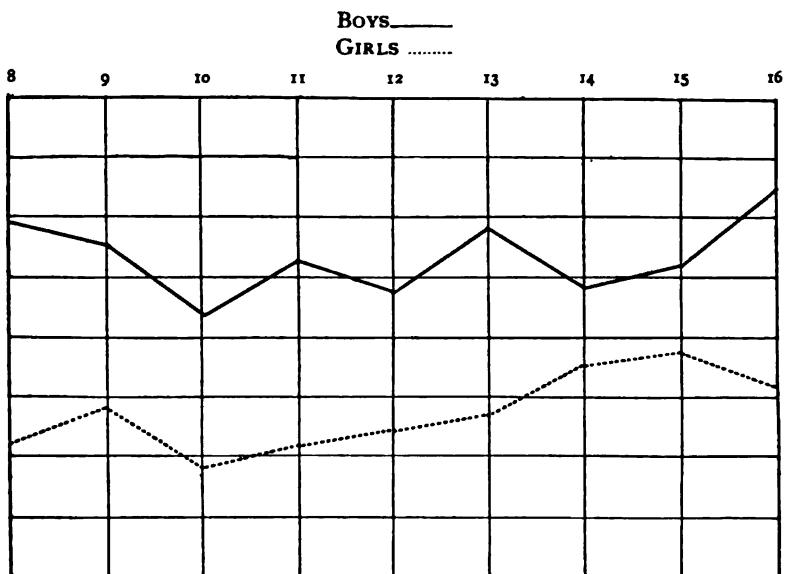


CHART VII.—MONEY.

Boys _____
Girls

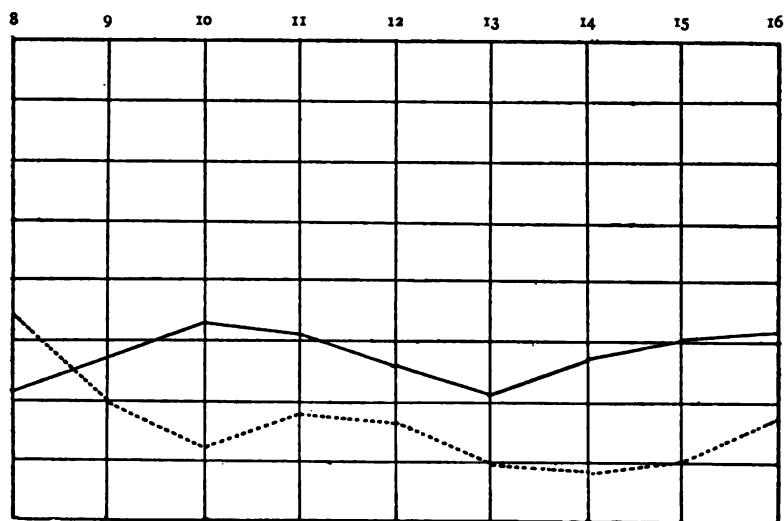
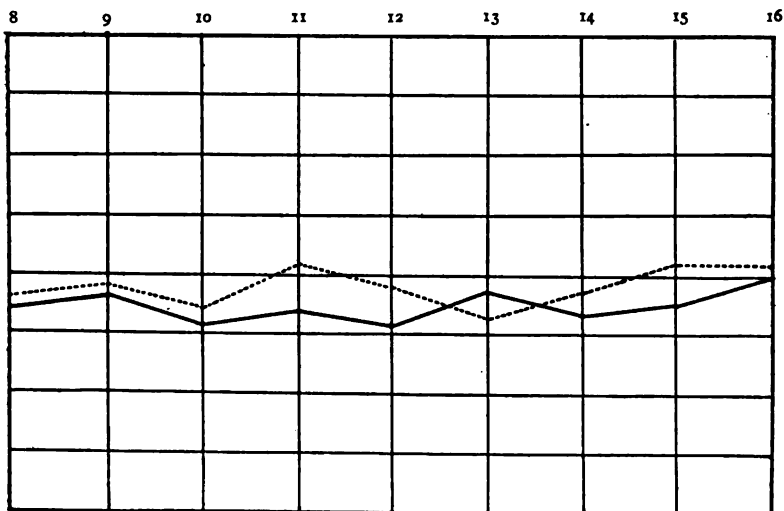


CHART VIII.—PHILANTHROPY.

Boys _____
Girls



questions were asked: What were your ambitions while you were in the grammar and high school? Could your teacher have helped you if he had known them? This class of papers was difficult to secure. Only seventeen were obtained, eleven from men and six from women. The ambitions varied but slightly from those given by the children. Three out of the seventeen, and they women, adhered to their first choice, that of artist, poet, teacher. The others had passed through a series of ambitions, one man mentioning as many as nine, and his sister, six. In a few instances there was a return to the first choice. One man came back three times to the desire to be an author. Fourteen traced their choice directly to environment; others ascribed it to the influence of books, pictures, and examples of great men. This cannot fail to emphasize the importance of good pictures and good books in the school. The majority of the writers stated that their teachers might have helped them by giving an encouraging word, or suggesting a course of reading. It is interesting to note that the constant ambitions and those that repeat themselves are such as are generally acknowledged to involve a special talent.

The second test was made upon children in the seventh and eighth grades. At the beginning of the year, six boys and twenty-two girls in the same class were asked what they would like to be when grown; at the close of the year the question was repeated. Six who at first answered that they did not know, chose later the occupations of teacher, dressmaker, sister of charity, milliner, artist. Those that gave the same choice at the beginning and the end of the year, wished to be teachers and bookkeepers; one who chose to be at first a teacher of painting decided later to be an artist. The occupations of the boys that remained unchanged were those of farmer, inventor, engineer.

It is much too soon to answer Mr. Barnes's eight pertinent questions:—

1. Is there anything permanently significant in children's ambitions?
2. What are the motives to which we can strongly appeal, or which we need to overcome, in boys and girls of different ages?
3. Are there social misconceptions in the minds of American children concerning labor and responsibility? If so, how far can they be corrected?
4. Is money exalted to a position of undue importance in children's minds?

5. Are there periods in children's lives when they are specially egotistic? When they are altruistic?

6. Do different schools give different ideals of life and occupations?

7. How far and at what time should prospective occupation influence the education?

8. Is there any relation between the choice of the profession made by a child and his actual ability?¹

Conclusions drawn from insufficient data will be not only useless, but positively misleading. When thousands of children, instead of hundreds, have been tested, then, and not till then, will such questions be finally settled.

¹ Leaflet on *Children's Ambitions*. By Earl Barnes. Stanford University, 1896.

CHILDREN'S ATTITUDE TOWARD LAW.

II.

ESTELLE M. DARRAH.

Our first study upon children's attitude toward law was so far removed from the actual life of a child that we supplemented it by a second test—a possible case of school discipline—reading as follows:—

Two boys were fighting on the school grounds, when the teacher came along. The rule was that any one fighting should lose his recesses for a month. One boy ran home and did not return. What would you have done with the other boy?

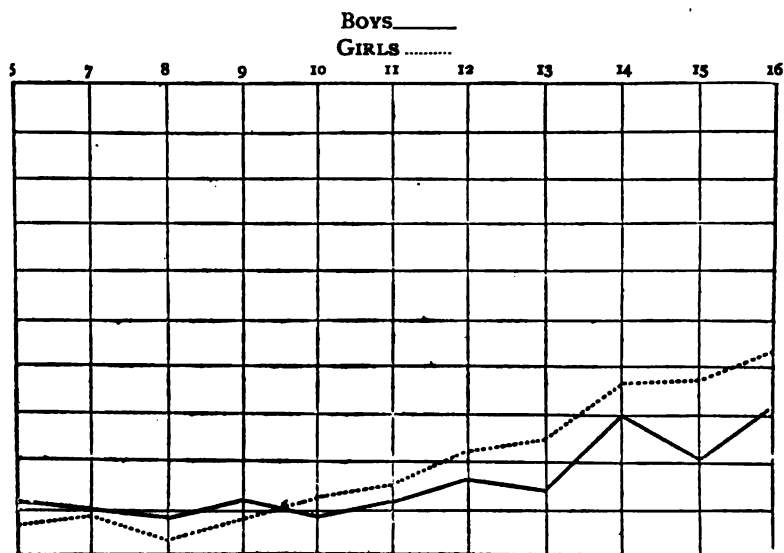
Our returns proved the incident presented to be sufficiently close to the life of a California school-child, the culprits being identified by many of the children as their school-fellows. "The boys' names were Willie Reynolds and Frankie Brown," writes a girl of nine, while the accused Willie Reynolds, after non-committal answer to the question, adds that he knows another boy who was fighting, whose name he gives.

If last month's study really showed a general tendency in children, we should expect that the papers written in answer to the present test by entirely different children, living in totally different communities, would nevertheless show the same tendency. Accordingly, we should expect to find young children ignoring the specified penalty and substituting punishments dictated by caprice, but constantly growing in regard for law after the age of twelve.

As a matter of fact, the present study strongly corroborates the conclusions previously reached. (See Chart I.) The punishments of the younger children are administered with regard neither to the law nor to the nature of the offense committed. The boy who was caught had done wrong—let him therefore suffer. "Put him in jail," "tie him to a post," "lock him in a closet," "send him to the reform school," suggest gently reared six- and seven-year-old children, while many of the older children would administer punishments exactly as inappropriate to the offense. "Make him write 500

lines in ink," says a thirteen-year-old boy; and another remarks: "I think ten checks is very bad. Give him that, and that is a hole lot." Whipping is a favorite punishment, given by thirty-five per cent. of the six-year-old children, and by one per cent. of those of sixteen. It must be added, however, that it is often supposed to make the punishment less. Says a boy of ten: "If I had been the teacher and the rule was that any one got into trouble would lose his recesses for a month, I would not make him lose his recesses for a month. I would whip that boy and make him lose his recesses for a week, and then the process is over."

CHART I.—INCREASE OF REGARD FOR LAW.

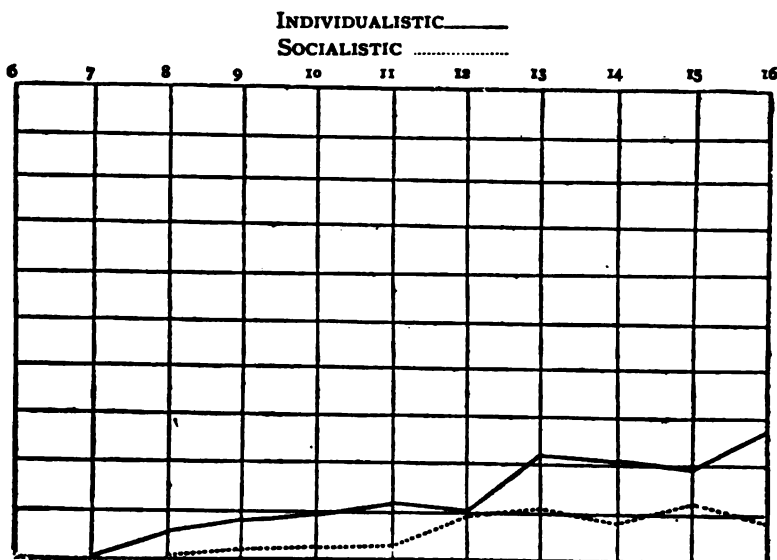


The contradictory elements which exist in our most highly developed ideas of justice are struggling into consciousness as the children grow older. The culprit has come under the law, and hence should be punished by the law, but still he is regarded as brave and honorable because he did not also run away. On the one hand, stands the sacredness of law; on the other hand, its adaptation to individual circumstances,— exactly the same elements which enter every court of justice.

Virtuous conduct is regarded by eleven and one-half per cent.

of the children as sufficient atonement for previous wrong action. The boy who remained is at once idealized. That the other boy ran home is regarded as proof that he feared an investigation, and hence must have started the fight. "I think that the boy that did not run home ought to be excused. Because he was trueful and stood," says a boy of twelve, and his courage and honor are admitted by many of those who would impose the full penalty. At seven, one-half per cent. of the children would modify the punishment on account of the virtuous conduct of the culprit, the number steadily increasing until, at the age of sixteen, it includes twenty-seven per cent.

CHART II.—MODIFICATION OF PUNISHMENT.



Quite opposite to this tendency is that shown by four and one-half per cent. of the children, who modify the punishment, because, as a boy of fifteen puts it: "If you would punish one you would have to punish the other. You can't punish the other so you can't punish the one who remains." This insistence upon both boys receiving the same treatment appears first at the age of eight in one-half per cent. of the children, increasing to eleven per cent. at thirteen, and remaining about stationary thereafter. Undoubt-

edly, every child included in this number would be inclined to charge his teacher with partiality. But this feeling does not show a low grade of development. The likeness of man must be felt before unlikeness of treatment can be resented.

Does not Chart II show exactly the same opposing lines of development, "writ small," that modern society is following? The children who modify the legal punishment on account of extenuating circumstances are individualists, seeking the highest good of the human being concerned. The children who modify it because both boys abstractly deserve the same treatment are socialists, considering all as equal before the law. And, as in society of to-day, the individualistic tendency is gaining on the socialistic; so in this microcosm we find a growing preponderance of those who would treat the culprit according to his supposed merits.

As was to be expected, the law is recognized increasingly. As shown by Chart I, at the age of six only eleven per cent. of the boys and seven per cent. of the girls would inflict the authorized punishment, while at sixteen thirty-two per cent. of the boys and forty-four per cent. of the girls would observe the law. At first it is employed merely to add impressiveness to the scene. "I would have scolded him and tell him the rules, then I would give him some paper and make him write, 'You are not to fight on the school grounds,' " says a boy of nine. Some frankly acknowledge its majesty, but miserably fail to live up to their theories, as is the case with this boy of fifteen: "The boy who did not run away should be kept his full time. Because the other boy was cowardly enough to run away is no reason why he should not receive his just punishment, but if I were the teacher I should let him go in about two weeks."

In a far more comfortable frame of mind is the young Brutus who declares firmly: "I would do what is right. I would make him lose all of his recesses for a month."

Several, while inflicting the specified punishment, at the same time recognize the virtue of the culprit, as the boy of twelve who "would have taken his recess away from him for a month, but marked him excellent in deportment for that month because he was honest."

As Chart I shows, there is a general increase in the regard for law. After the age of nine, girls show more respect for it than

boys, possibly because of their greater subjection to the laws of convention. At sixteen, forty-four per cent. of the girls and thirty-two per cent. of the boys observe the law. It will be noted, that while following the same general movements, the curve shows considerably less regard for law in this concrete case, so near the child's life, than was shown in the more abstract case previously presented.

Summing up our evidence, it appears that the majority of school-children look upon the rule with its definite penalty as merely a device to inspire terror,—a threat not at all connected with the actual punishment for the offense specified. After the age of twelve, the three most prominent tendencies of modern society are so strongly developed that they claim recognition in our dealings with children. The first, conservative, recognizing arbitrary, man-made law as immutable; the second, individualistic, proposing an adaptation to personal circumstances; the third, socialistic, protesting against any one person enjoying advantages which another cannot enjoy.

Our practical application of these conclusions must be identical with that of the previous study:—

I. Since young children ignore law, rules should not exist in the discipline of the school. Each infraction of the law of right and each act of disobedience should be treated on its individual merits.

II. After the age of twelve, children should be introduced to the more simple and prominent laws of social and civic life.

The George Junior Republic of Freeville, New York, has practically demonstrated what can be done in this line of work. Children from twelve to seventeen years of age, many of them from the slums of New York City, under the presidency of Mr. George, are exercising with remarkable judgment all the functions of government,—legislative, executive, and judicial, as well as learning through experience the relations existing between the various classes,—industrial, commercial, and professional. See *The Annual Report of the George Junior Republic Association of New York City*.

WHO HAS THE BEST RIGHT.

GENEVRA SISSON.

We need to understand better, not merely the relation of children to the authority of parents or teachers, but also the relation of one child to another. From the child's standpoint, what gives one child more right than another to be leader in the marches or to go to town with the mother? In a family or a school, what will the children themselves recognize as a just basis for discrimination in bestowing favors among them? If we understood better the answers to these questions, we would not so often hear such remarks as, "I think mamma ought to have let me go with her this afternoon instead of taking Jennie," or "Our teacher's partial."

To help solve this problem, observations, covering about seven months, were made upon the six children in the Stanford University Kindergarten. Questions were constantly arising as to which child should be leader, which should hold my hand in the ring, play a favorite part in a game, or possess any of the other honors coveted by children because of the self-aggrandizement involved.

In all these cases I simply said: "You must settle it yourselves. Each of you tell me why you think you have the best right to be 'it' to-day." The children would then proceed to discuss their respective cases, giving the reasons for their claims. If, after they had talked the matter over, they could not come to an agreement, they arranged it themselves, by one side or the other giving up. It was fully understood by all that when they gave up in this way they did not acknowledge themselves to be wrong. On the contrary, both sides simply recognized a deadlock of all their games or work, waived for the time being all question of rights, and decided which of the two contestants would make the other happy. I never interfered; so that the results are as free as possible from the bias of a teacher's authority.

The children ranged in age from three to seven. I noted over sixty instances where a question arose, and often several children were involved in each case. Owing to the exigencies of practical

work, it was not always possible to get a record of the individual opinion of every child concerned. Still, I recorded 163 different expressions of opinion. Out of these, only four times was the answer given, "I don't know." Three of these four answers were from the three youngest children.

May we reasonably conclude from this that even children of kindergarten age have decided ideas on the question of what they consider their rights? If so, ought we not to acquaint ourselves with and respect these feelings, in order that a sense of injustice may not remain with the child?

The three little ones, one three years old, and the other two four, think that "I want it" is an entirely sufficient reason for possession. Hilda, four years old, gives no other reason for her claim. The other two give very few other reasons.

Is it not true of the lower animals and of young children that a want or desire makes right to them? Is a young child, therefore, doing conscious wrong when it demands a privilege as its right, simply because it desires it, no matter where justice may lie to the adult mind? Should a young child be rebuked or punished for making such a demand? Rather, is it not the duty of the parent or teacher to find when a higher sense of justice tends to arise in the child's mind, and when an appeal can be made along different lines?

Looking further down my list, I find that the next oldest child, a boy of five, gives, "I want it," as a reason but twice during the seven months. In one of those cases he is doubtful; for he says, "Because Christabelle wants to do things, that gives her a right to do them sometimes. I don't know when it does or when it does n't though." The two older girls, one six and one seven, do not give "I want it" as a reason at all. So with our children, at least by the sixth year, the question of justice begins to take a different aspect, or, at least, is differently expressed. May not the very fact of their ability to express other reasons in words mean something in itself?

As a compensating feature to the sense of the little ones that whatever they want should be theirs, we find them agreeing with the opinions of other children much more often than the older ones do. For instance, Christabelle, three years old, volunteers only once the belief that she should have a favor because she asked first;

while she agrees twelve times with the same reason brought forward by older children. On the other hand, George, five years old, volunteered his own opinion forty-seven different times, and only agreed with the opinion of the other children fifteen times. About the same relative proportion holds true of the others. This was not due entirely to selfishness on the part of the older children; for very often the reasons recorded were given by them in defense of the position of another child. The element of sex may play some part in this comparison.

Therefore, with our children, the younger ones, while having a distinct idea of egoistic justice, were much more easily convinced than the older children of the justice of reasons advocated by other people. If this is so, will there not be a tendency for the younger child to regard as perfectly just the overriding by parent or teacher of his plea, "I want it," while the older child will regard as unfair the arbitrary disposal of his belief?

What are the reasons advanced and doggedly adhered to by the older children? They are divided into two main groups: First, those clustering around the sense of priority, such as "Have it now," "Had it a while ago," "Asked first," or "Found it." Opposed to these, we have those bearing on the question of turn. For instance, "Turn about," "Never been 'it,'" "Have n't been 'it' for a long time," "If I have it to-day I should let some one else have it to-morrow," "I gave up before."

We find eighty-three reasons on the side of priority as against fifty-five on the side of turn. Is not this large balance against turn due to the weak time-sense of the children? Do they not live in the present much more than in the past? Yesterday is weeks ago to them. When the question of turn-about did affect them, it was often due only to a cumulative sort of sense that some child, by virtue of such a reason as "asked first," was playing a special part very often, as in the claim: "I think I ought to be 'it' to-day; George has been 'it' all the time, and I am never 'it.'"

Length of time also affects the question of turn. An example of this is found in the following illustration from our record: "George then said he wanted to be 'Sunshine.' Katrine said, 'But, George, Rose gave up for you last time we played it, so you should n't be 'it' to-day.' 'Oh!' said George, 'that was a *long* time ago. That does n't have any effect on to-day.' I asked why what they did last

time had an effect sometimes and did not at other times. 'Well,' said George, 'it don't have any effect because it was so long ago. It was n't so long since we played Jack Frost.' Hilda and Katrine agreed. I asked how long ago things had an effect. 'That's what I don't know,' said George. Neither of the others knew either."

Does not all this show a tendency on the part of children to let bygones be bygones, to drop the past, so remote to them, and start on a fresh basis each time?

There are several interesting questions that come up in connection with the subject of priority.

Which counts most with children, following the letter or the spirit of the law?

For instance, take the following from our record: "The question came up again to-day between George, Ellen, and Katrine as to who should take hold of my hands. Katrine and George had them first. Ellen tried to take the one Katrine had; Katrine resisted, so Ellen stationed herself just behind my arm, nearer to me than Katrine, who was still holding my hand. Katrine claimed that such a procedure was not fair; that if she got my hand first, that gave her the right to stand next me also. Ellen claimed that, as she could not have a hand, she ought to have the right to stand next to me at least. To enforce her argument, she stationed Hilda as close to me as possible on the other side, forcing me to hold out the hand which George was grasping. They settled by giving up; but the opinion given above was an expression of what they considered their rights."

In the following instance, illustrative of the same point, readiness counts as much as actual asking. "The children were forming the ring to sing their good-by song. George stood waiting in the corner where I had asked them to make the ring. Christabelle got down from her chair, took my hand, and we walked over together to the corner. When we came to where the other children were, George claimed my hand, saying that he had been ready and waiting first. The other children all agreed, saying that George had the best right."

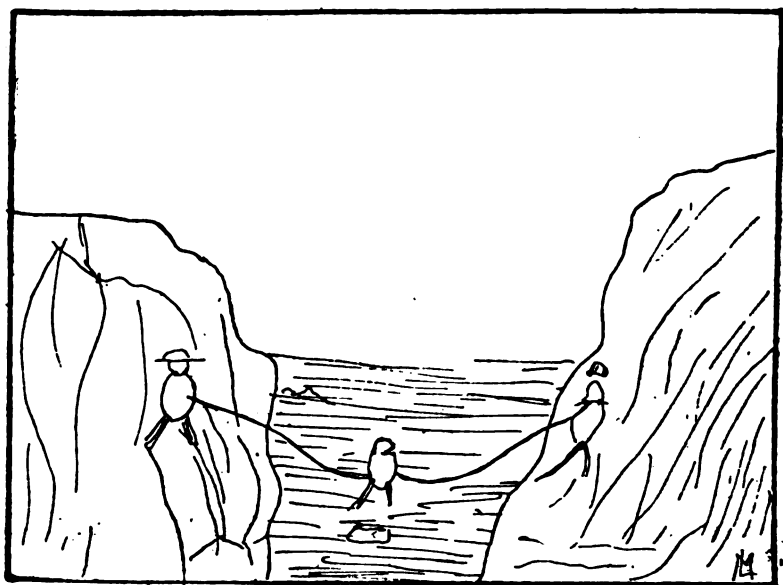
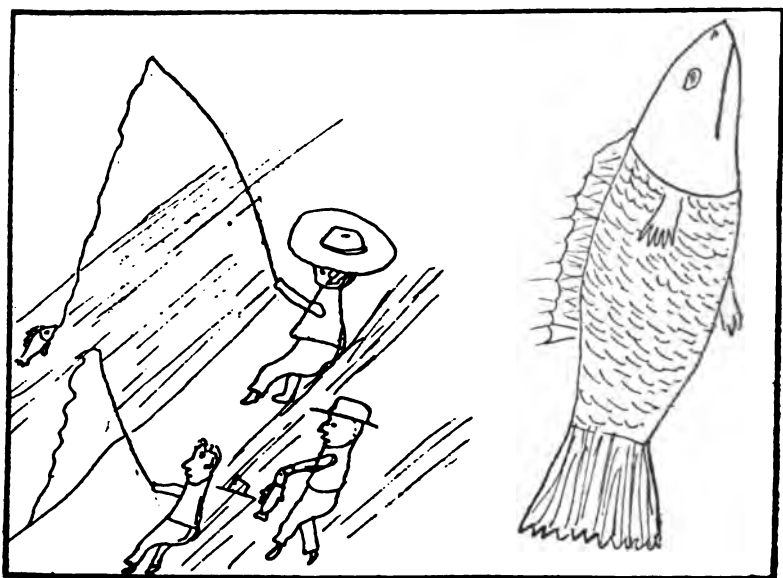
Whether the child expresses in words his feeling or not, he expects that his subjective attitude will be understood and count for as much as if he had actually voiced it.

Again, does original possession mean eternal possession, no matter what has intervened? The following conversation illustrates this question: "Ellen got my hand first in the ring. George came up a minute later, and she said, 'Here, George, you may have Miss Sisson's hand to-day.' George took my hand, but a few minutes later Hilda came. Ellen wished Hilda to stand where George was, perceiving that by that arrangement she would sit with Hilda; so she said, 'Now, George, Hilda is going to stand there.' 'No, she is n't,' answered George. 'This is my hand now; you gave it to me.' 'Yes, but it was mine in the first place,' said Ellen, 'and I have a right to give it to any one I want to.' George still insisted that it was his. I asked George, 'Would it have made any difference if Ellen had said when she gave it to you that she wanted Hilda to have it?' He said, 'Yes; then I would have given it up when Hilda came.' Ellen still insisted that she retained the right to anything that was hers in the first place."

To sum up, the above observations show that, among our six children, there exists a very definite sense as to certain rights, together with a willingness to compromise these rights for the sake of action. These rights, at our earliest observed age, seem, as far as expression indicates, to be based simply on desire, and are easily yielded to the opinions of older children. In two or three years more, this primitive basis is modified, strengthened, or even superseded, by notions of priority and turn, while the idea of rights is much less easily bent aside by others; that is, it has risen unconsciously into the realm where law is felt to be stronger than any man, woman, or child. Even so, this idea of rights, based on desire, priority, and turn, is strong only within a limited time. So our reasons can be drawn only from to-day or this week, hardly from last month, perhaps never from last year.

Should this study be confirmed by others, its pedagogic implications are clear. With very little ones, impose your own opinion, supported by your wish, adding reasons of priority and time; as they grow older, lean more and more upon these latter reasons, taking the children into your counsel, and allowing the decision to rest more and more on a mutual view of the circumstances; but do not try to rest your case on circumstances too far removed from the present, and take into account the unexpressed but evident expectation of the children.

FRAGMENTARY THINKING.



COMMENTARY ON THE PICTURES.

In some of the earlier *Studies* we have called attention to the fragmentary quality of children's thinking. The two pictures in this issue are intended to illustrate this point more fully. They were drawn by children to illustrate the story of *Hans-guck-in-die-Luft*, as printed on page 105. No. 1 was drawn by a girl twelve years old. It will be remembered that in the story there is nothing said about fishing, and yet, in this picture, the story has turned into a fishing scene. The picture seems to have been built up something like this: the girl drew the river, intending to represent the scene where the two men rescue Johnny; when she had the two rescuers ready, her mind was accidentally distracted, or ran off of its own accord, and she drew Johnny on the bank with the men; this new relation, reflected back from the picture, still further distracted her mind, and left it open to the play of suggestion; the river made her think of fishing, so she put poles in the men's hands, with lines on them, one fast to a fish; the third figure was too far back from the bank to hold a pole, so she put a fish in his hand; her success in drawing the fish made her think that it would be nice to draw one on a larger scale, so the rest of the page was given up to making a nice large fish.

In the other picture, the river was drawn and Johnny floating in the river, then a man was drawn on the bank, with a pole hooked to Johnny. At this point the artist remembered that there was another man involved. The part of the scene so far completed had faded into the background of consciousness, and, seeing a good place for the man to stand, he drew him on the opposite bank of the river, pulling Johnny in an opposite direction from that of the first man.

These pictures seem to me to mark one of the more characteristic qualities of the untrained mind. It thinks in bits, pieces, fragments. Lacking continuity, it is easily played upon by suggestion, and goes off along lines of associated ideas. If one could have a map of the ground over which the mind of an ordinary ten-year-old child travels during a forenoon in school, it would be at many points of the course miles away from the route laid down by the curriculum and traveled over by the teacher.

EPISODES OF THREE LIVES.

X.

THE THOUGHTS OF THEODORE.

Theodore sat before an old book, reading these words:

"Of things absolutely or in themselves, be they external, be they internal, we know nothing."

But thinking these thoughts: "what a lovely dream-child she is; she should be called Magnolia, for she is as magnificent and pure; and the atmosphere of reverie that ever surrounds her is as its tropical fragrance; if anything could ever make a prosaic man a poet, it would be her presence."

Just then he looked through the window and saw her passing with a stranger, and he thought, "I have seen her with this man often lately; what does it mean; to be sure he assumes the dress and manners of a young prince, but they set off a face which animal nature and not man-nature has made. Can Linda enjoy the conversation of such a man as that appears to be? She with her noble soul, her fine culture; it is n't possible. And yet——

THE CONVERSATION OF LINDA AND THE STRANGER.

A FRAGMENT.

Linda.—And so you know my brother; why have n't you told me before? Is he still at Paris and sick? I have n't heard from him in a long time.

Stranger.—He is neither at Paris nor is he sick, and yet there is a good reason why he should not write; for he has committed a capital crime, and he would expose himself by writing.

L.—What do you mean?

S.—What I say; he has not concealed it so well but I have found it out; and, Miss Linda, there is only one condition on which I will save him, and that condition is one which you only can fulfill. You alone can save your brother from death and your family from disgrace.

L.—What can a girl like me do?

S.—I repeat it, you can save your brother if you will.

L.—How?

S.—By becoming my wife; if you refuse you will have bought your freedom by murder and shame, for I have all in my power; and if you dare to say anything of this your brother dies. I will give you a month to decide.

THE THOUGHTS OF LINDA.

She was sitting in the twilight, the new moon was sweeping up into the blue; the tones of a distant organ came through the air; the rippling river shimmered with light. Suddenly a great black cloud covered the moon; the sparkle disappeared from the river, the sweet melody died away in sad minors, and distant thunder muttered. "It is the symbol of my fate," thought Linda, "my heart, which only yesterday was filled with happy song and light and over which hovered the angels of hope and joy with their rainbow-wings, is now only full of despair and dark demons."

THE THOUGHT OF THEODORE.

Can it be possible that she really loves this foppish, dissipated dandy, she with her beautiful poet-nature. There must be some mischief then; and if I could only find it out; I saw him throw a letter down in the river yesterday, evidently with purpose of destroying it. That might throw some light on it. But it isn't possible, I am wild; still it won't do any harm to go down that way.

THE WALK.

The letter was there, sure enough, it had only fallen on the margin, and not into it; but strangely enough, it was directed to Linda and not to D'Abigny. He thought, "What business has he to treat one of her letters in this way, even if they are engaged. I will take it to Linda, at any rate." And slowly and thoughtfully he went along the path over which he had so often trodden joyfully and expectantly. When he inquired for Linda the servant said that she could not see him to day, and so he left the letter and turned back along by the river. His mind no longer had thoughts but only disconnected ideas; it was in a wild, confused state. There lay the river calm and peaceful in the sunset light. An instant, and the long life that was before him full of sorrow, along whose way there were no flowers, but only the gray ashes of consumed hope,

one *instant* and all this misery would be a nothing and he will be at rest in the bed of the broad, calm river, so smooth, so calm in the sunset; he stops. Resistance becomes weaker and weaker every moment. If he would only think that only the *body* and not the *soul* will be at rest. Ah, men reflect so little on the Invisible and eternal, although the visible and temporal are only its symbol and type.

—By a girl fifteen years old.

COMMENTS, SUGGESTIONS, AND QUESTIONS ON STORY X.

[This commentary was written by the girl who wrote the story. She is now a woman of middle age, and occupies an important place in the world of letters.]

The end of the story was this: that Linda, on returning, would find the letter; on opening it, she would discover that her brother had recovered, was on his way home, and in no manner of trouble. She would then call Theodore to her, thank him for his rescue of the letter, her whole story would come out, Theodore would confess his love, be accepted as a protector, and the villain disappear forever.

With what joy I began this story. I saw Theodore, dark-eyed and pensive, while Linda floated, indefinitely fair as a spirit. The parts which I wrote with the greatest joy were *The Thoughts of Theodore* and *The Thoughts of Linda*. There I expressed my whole dreaming soul, full of longing for the good, the true, the beautiful and fit. The old book, with its sentences about the absolute and eternal,—it was large, and bound in a rich, dark leather,—the magnolia, with its rich fragrance,—these suited the dark-eyed Theodore and his dreaming passion,—and I longed to bring them together. So with the thoughts of Linda; they belonged with music and moonlight, and I had the pleasure of giving them just their right setting. It was artist's joy that I felt, and consciously so. This joy was satisfied after I had written these fragments; the rest was machine-work to connect them with some tangible circumstance, for I felt that they were bodiless, and deserved a body. Yet the story was never ended, for that involved practical circumstances and real conversations, and what I cared for was already expressed, a dream and its atmosphere.

As I look back now, I can see, too, that it was autobiographic; that I was both Theodore and Linda, with my too dreamy sentiment, with my love for all that pleased the senses. I can see, too, how simply my environment displayed itself, a rather solitary child's life among trees, by the ocean-side, where I loved to watch the play of moon and breeze. Circled by great spruces, there stood one rare magnolia, an imported beauty from the South. In the name of "Linda," and in "the rainbow-wings of the angels of hope and joy," there is the plain trace of Richter's *Hesperus*, a book passionately beloved by the girl of fifteen.

I was in the habit of writing both at school and at home, but I wrote like this only for myself; a secret delight filled me as the beautiful dreams grew into something that I could see and read again and again. In a way, the writing realized my desire to breathe the air of an ideal romantic world.

A pedagogic application? I would have resented with an angry passion, and I was not easily capable of anger, any attempt to discover or tamper with this precious literature hidden between the covers of the red book that no one else could read. People did n't understand, and it was none of their business. And I am of the same mind yet.

DISCIPLINE AT HOME AND IN THE SCHOOL.

VII. THE TABULATED RESULTS.

EARL BARNES.

To avoid the trouble of working out percentages, and for convenience in comparing and combining results, it seemed best to collate one hundred papers written by boys, and one hundred written by girls, of each age from eight to sixteen inclusive. Thus the tables represent the evidence from 1800 papers describing unjust punishments. Children under seven have so much difficulty in writing that it seemed best to omit their papers in this general view. Of course the papers were taken exactly as they came to us, without any selection. Through all the tables the top line represents boys and the lower line girls. The vertical columns will not always equal one hundred, owing to the fact that sometimes the offense, or the punishment, or the reason was omitted, and sometimes two or more were given in a single paper.

The number of children who say they have never had an unjust punishment runs as follows:—

AGE	8 Yrs.	9 Yrs.	10 Yrs.	11 Yrs.	12 Yrs.	13 Yrs.	14 Yrs.	15 Yrs.	16 Yrs.	TOTAL.
	30 17	34 14	9 11	30 25	24 17	18 33	13 47	30 30	31 42	246 265

CHART I.—THE PUNISHER.

AGE	8 Yrs.	9 Yrs.	10 Yrs.	11 Yrs.	12 Yrs.	13 Yrs.	14 Yrs.	15 Yrs.	16 Yrs.	TOTAL.
Parent {	42 49	50 31	22 33	21 31	26 29	28 18	18 22	10 14	16 20	233 247
Teacher {	13 18	17 14	25 18	34 23	33 31	32 39	45 38	41 44	49 63	289 288
Nature {	0 0	0 0	1 0	0 0	0 0	0 0	0 1	0 0	0 0	1 1
Child without authority {	2 0	3 3	2 1	3 2	3 3	1 2	1 1	1 0	4 0	20 12
Adult without authority {	0 4	1 0	2 1	2 3	1 2	4 1	2 5	6 0	3 8	21 24
Indefinite {	3 4	0 11	15 11	0 14	5 2	5 1	4 3	14 3	3 4	49 53
No mention of punisher {	40 25	29 41	33 36	40 27	32 33	30 39	30 30	28 39	25 5	287 275

CHART II.—PUNISHMENTS RECEIVED.

AGE	8 Yrs.	9 Yrs.	10 Yrs.	11 Yrs.	12 Yrs.	13 Yrs.	14 Yrs.	15 Yrs.	16 Yrs.	TOTAL.
Whipped {	35 29	21 26	42 27	23 18	37 14	30 11	38 10	26 14	12 6	264 155
Confined {	7 14	9 12	20 19	10 13	18 24	20 16	14 11	8 25	18 21	124 155
Scolded {	2 10	9 14	5 13	2 5	2 15	1 13	5 14	4 5	7 7	37 96
Marks or checks . . . {	2 1	0 1	0 4	1 4	0 1	2 2	5 5	3 3	3 9	16 30
Sent to bed {	6 2	2 4	1 3	5 2	1 4	2 0	3 1	1 0	0 0	21 16
Lose meal {	0 1	0 1	0 1	3 2	1 2	1 1	1 2	7 0	0 0	13 10
Shake, strike, or slap . {	6 12	6 9	6 7	7 8	7 7	5 4	8 4	11 6	5 1	61 58
Lose a treat {	0 0	1 4	1 3	1 1	1 3	5 2	0 1	0 3	1 2	10 19
Extra task {	1 0	0 0	0 1	0 3	0 0	1 2	3 1	2 5	0 3	7 15
Correct the harm . . . {	0 0	0 0	0 0	2 0	0 0	1 1	1 0	0 0	0 1	4 2
Miscellaneous {	0 1	0 0	2 2	2 1	1 1	5 4	3 3	10 10	6 0	29 22
Indefinite {	10 10	11 16	17 10	12 10	10 12	12 12	13 5	7 2	7 8	99 85

CHART III.—OFFENSES COMMITTED.

AGE	8 Yrs.	9 Yrs.	10 Yrs.	11 Yrs.	12 Yrs.	13 Yrs.	14 Yrs.	15 Yrs.	16 Yrs.	TOTAL.
Talking or whispering . {	4 4	3 7	3 6	1 4	4 8	4 11	11 7	8 12	3 9	41 68
Destroying things . . . {	10 19	9 21	12 11	12 4	5 9	11 7	11 5	1 4	5 4	76 84
Neglected work {	2 9	6 2	9 8	2 8	2 11	10 13	3 8	7 14	6 6	47 79
Taking things or stealing {	3 3	2 1	4 3	2 2	1 4	5 0	3 3	2 3	4 0	26 19
Story-telling or lying . {	1 0	0 1	3 1	0 0	0 1	0 0	1 1	0 0	0 0	5 4
Running away {	3 6	3 7	7 7	2 3	8 1	6 1	2 2	0 3	5 0	36 30
Tardiness {	3 3	3 7	10 4	6 8	1 4	6 2	4 0	5 2	3 3	42 33
Fighting or quarreling . {	13 11	4 6	9 7	9 12	12 7	13 2	10 2	9 1	5 0	84 48
General Disorder . . . {	17 12	18 12	15 18	11 17	18 11	14 14	15 17	28 10	20 17	156 128
Miscellaneous {	6 14	1 14	11 12	16 9	12 20	10 11	23 3	10 20	9 17	98 120
Indefinite {	8 7	7 10	8 14	7 1	10 6	6 5	8 5	9 5	7 2	70 55

CHART IV.—REASONS WHY UNJUST.

AGE	8 Yrs.	9 Yrs.	10 Yrs.	11 Yrs.	12 Yrs.	13 Yrs.	14 Yrs.	15 Yrs.	16 Yrs.	TOTAL
Not guilty. {	9 8	11 9	12 8	6 9	8 7	7 7	17 9	14 12	16 7	100 77
Act was right {	4 2	5 2	11 6	5 4	10 4	4 6	0 2	5 4	3 0	47 30
Ignorance {	2 4	4 7	6 8	4 5	3 8	5 3	3 2	2 5	3 2	32 44
Did n't think {	0 2	0 2	4 2	1 0	1 2	1 0	0 1	0 0	0 10	7 19
Was provoked {	1 0	2 2	5 1	1 5	3 1	4 1	0 0	3 2	3 1	22 14
Could n't help it {	12 11	9 12	12 5	4 12	9 6	12 7	9 8	6 10	6 3	79 74
Punishment of wrong kind {	3 4	5 3	7 7	10 5	8 5	13 9	9 7	4 5	7 3	66 48
Partiality was shown . {	0 1	0 3	1 1	7 4	1 3	3 6	3 0	3 6	8 3	26 27
It was some one else . {	12 5	14 13	12 12	13 14	17 13	11 15	20 12	12 6	11 20	122 110
Miscellaneous {	3 14	3 1	4 5	3 1	3 2	4 4	15 5	6 7	4 1	45 40
Indefinite. {	25 33	13 32	17 34	16 15	13 17	18 8	14 7	15 7	8 8	139 161

The headings "defective evidence" and "changed point of view," suggested on page 192 of these *Studies*, proved impractical in collating the evidence. In the next number an attempt will be made to work out some generalizations from these tables.

MY EDUCATIONAL RECOLLECTIONS.

BY HERMANN KRÜSI.

TRANSLATED BY HIS SON, HERMANN KRÜSI.

II.

Before my meeting with Pestalozzi I held the system in high estimation which, by dexterous questions, could elicit answers from the children. Having read in educational writings that Socrates had possessed this faculty in a high degree, the term "to Socratize" presented to me an almost magic charm. When I communicated my views on this subject to Pestalozzi, he could not refrain from a knowing smile. "This art," he then said quite earnestly, "when applied at the proper time and place, has its own value, but it is utterly worthless for teachers and children in the public schools. Socrates was surrounded by young men who had a background in the knowledge of words and things. If you take pains to give your children first this background, then the necessary questions about things within their own observation will be naturally suggested. Without this background, every attempt to elicit proper answers from the children by artfully put questions is mere thrashing of straw, and leads to sore deception or discouragement, which may even deprive you of faith in yourself."

This reply was not quite to my taste, but, feeling its truth, I had to submit to it. My problem now became how best to create this knowledge of things and of language. Was it perhaps to be done by books? Pestalozzi had none, and had not read any for years, and those which Tobler had brought with him from Basel did not accord with Pestalozzi's views. Hence, we had to depend on our common sense, on our experiences, and on Pestalozzi's suggestions. . . .

Yes, dear sons, we are so accustomed to books, and consider them so necessary for instruction, that we can scarcely imagine a school without them. Yet we taught without them for years, and in truth, that joy and vitality which inspired us at Burgdorf would

be hard to find in schools where, year in and year out, books were used in every grade and for every age. Our great ever-open books were the nature that surrounded us, and the animating spirit of man, declaring itself in speech, number, and form. That these original activities of the human spirit are the ever-renewed means of its development is the undeniable discovery of Pestalozzi. Through their analysis, presentation, and elaboration he has rendered immortal service to humanity. He was thoroughly convinced that the human mind is not developed through the acquisition of the thoughts of others, but through ideas formed by observation, leading to rational judgment and safe conclusions. . . .

In the teaching of language, Pestalozzi discarded the rules of grammar, usually thrust into the unwilling memory of children, but required, instead, that the child should make observations, distinctions, comparisons, . . . of real objects, and that he should afterwards express in his own language that which he had noticed. It is only in connection with the proper use of language that rules and definitions can be introduced that are fully apprehended. In this vast field of language many experiments were tried and again laid aside, because they contained much that was isolated, incidental, and disconnected. We all felt that such exercises for thought and expression [*Denk und Redeübungen*] ought to have a distinct beginning, and then, extending from step to step toward a worthy aim, form a connected whole, if they were to become a branch of education.

Pestalozzi was fully penetrated by the thought that the first instruction should be in the hands of the mother, who can give it in connection with every activity, want, and enjoyment of her child, in a graceful, loving manner, impossible to the teacher of a large class. Hence, he endeavored to supply the mothers with suitable means, and thought he had found these in pictures of objects which are near to and familiar to little children. . . . A good number of pictures had already been made by Buss, which the children had to describe. But during the descriptions of a painted window and a painted ladder, a six-year-old boy exclaimed, "Why not learn about the window in the room, and a ladder in the barn?" When I repeated this childlike remark to Pestalozzi, he exclaimed, "The boy is right; the real object is better than any picture, since every drawing incompletely represents nature." . . . Here

child and teacher changed rôles, for Pestalozzi . . . was not ashamed to learn from his children. To Nature herself we must now go forth, or we must bring her into the schoolroom,—that was now our rule. . . . The instruction became at once more vital, and we now hoped we had seized the right thread; but this was also destined to be broken. The very wealth of nature, industry, and art about us led us into such a chaos that we no longer knew in which direction to pursue our aim. Since this instruction was confided to me, I told Pestalozzi my trouble, adding that I did not know of any object in the world which was more instructive, or nearer or more important to every man and to every child than himself. Pestalozzi, reflecting for a moment, exclaimed with his usual vivacity: "He it is, and no one else. A year ago I said somewhere myself that what I will and shall do proceeds from myself."

To solve this problem was now the task which I, so poor and weak in knowledge, had to perform. . . . The result of my labors appeared in the *Book for Mothers*, published at Bern and Zurich in 1803. The examples in the seventh exercise are mostly by Pestalozzi himself, who came to my aid with his rich experience. The preface is entirely his work. For the rest I am alone responsible.¹

Besides the manifold exercises springing out of the objective teaching of language, the objective teaching of number presented a most important problem, whose solution also fell to me in Pestalozzi's Burgdorf school.

The instruction in number could only be made objective by taking leave of the sway which ciphering had up to this time exercised in the schools. Pestalozzi did this, to my astonishment, for I could not imagine any teaching of arithmetic without figures. I seized with enthusiasm his notion of separating the essential reality from its visible sign. . . . Nothing more than this separation was necessary to make possible a natural beginning for mental arithmetic, at least for units and whole numbers. For me this seemed the very invention of Columbus for making an egg stand on

¹ We shall hardly incur the accusation of lack of filial piety towards a revered father, when we say that the *Book for Mothers*, as a whole, on account of an almost pedantic minuteness in the description of the parts of the body, their positions, etc., could never have been popular, and, indeed, was not followed in his later years by Krüsi himself. He was fully aware of its defects, and perhaps, also, of the erroneous assumption that man, being nearest to himself, should, therefore, form the first object, physical, moral, and mental, of the child's observation.

end. For adding and subtracting Pestalozzi used black spots, or filled-up oval zeros, which by themselves, represented units, but, in combination, numbers. For me, the square little cards of the reading-desk rendered better service. Separated, they represented units; united, they formed a whole or a number. When I held up two of these cards separately before the pupils, they quickly, but softly, said, *Two times one!* When I pushed them together, *One times two.* . . . So the understanding of the two fundamental operations of mental arithmetic,—namely the formation of numbers from their elements, the units, and the separation into these units again,—came, as it were, by itself. Out of these two fundamental exercises arose a third,—namely, the transformation of numbers,—since those already built up, when separated into their units, might be combined into new numbers. . . . Out of exercises thus developed grew naturally the arithmetic and geometric comparison of given quantities, and, as a result of such comparisons, the understanding of simple relations and proportions. These simple exercises aroused in teachers and pupils a life and eagerness that often roused the astonishment of visitors, and added distinctly to the fame of the school. . . . In the schoolroom, in the passages, and even out of doors, you might often see groups of pupils, who, under the guidance of a teacher or some advanced pupil, were indulging in mental arithmetic as a pastime. You may imagine Pestalozzi's delight at such results. Nor did the young schoolmaster of Appenzell lack some flattering comments, which might have excited his vanity, if he had not harbored a deep consciousness of his weakness and backwardness in knowledge.

The question is often asked, whether, in the schools directed by Pestalozzi, religion received its due attention. Upon this point I am glad, dear sons, to give a few data, from which you will know how to answer the question for yourselves.

As Pestalozzi tried to reduce everything to its elements, so as to reach the true starting-point, so, here, he put to himself the question: How is man led to believe in God, to love and to trust Him? . . . and he found that the child obtains in his relation to his parents, his best preparation for all thought and feeling and action toward his Heavenly Father. Considering the parents as the earthly representatives of God, from the children's standpoint, he recognized in them also the mediators, through whom the children have access to God

and all that is divine. He felt it to be impossible that a child who loves his parents dearly, and who obeys them willingly and trustfully, could ever show himself cold, ungrateful, and mistrustful toward God. Parents who are aware of this high mission, will find their greatest happiness in leading their children nearer to God. . . .

He was the friend and father of the pupils and teachers around him. The testimony of a simple peasant, who declared that he found in his institute rather the spirit of a family than of a school, had for Pestalozzi more value than any praises of the scientific or artistic attainments of his pupils. He neglected his own pecuniary interest to such a degree, that, according to a report of a committee in 1802, about a sixth part of his pupils were supported at the expense of the school. He took a deeper pleasure over those who had gone astray, and showed signs of improvement, than over those who had never left the path of virtue. Early in the morning and at the close of day Pestalozzi gathered his pupils and assistants for religious exercises connected with prayer. As soon as he had the means, he called to the school religious teachers of both confessions [Protestant and Catholic], to whom he left special instruction, while he, as the father of the house, constantly inspired a true religious spirit in all our life. . . .

When I begin to speak of Burgdorf, I have almost to tear myself away from its enchanting recollections. I would like to tell you of the plays of happy children which the teachers not only guided and watched, but also shared; of our ever-varied walks, in which the attention of the children was directed to natural objects, many of which we took home to satisfy our curiosity or for the sake of instruction. I might tell you how, on our excursions, I received from Dr. Grimm my first knowledge of the characters of plants; how, when he visited our institute, the philanthropic Eschen von der Linth [a celebrated Swiss engineer] named some stones for me that I had picked up in the bed of the Emme; and how the friendly guidance of these men aroused me to more exact observation and more careful collection, made my walks more enjoyable, and put me into a position to give my pupils also higher pleasures in their wanderings through God's creation. I could tell you how among the youths who thronged to learn our methods, were to be found mature men, and even graybeards, who sat down in the classes with the children,

and eagerly worked through with them their every-day exercises. Among them was a gentleman from Stockholm, in Sweden, who, urged by fatherly devotion, had left his wife and new-born child and had come to Pestalozzi, in order to learn from him how he should bring up his child from the very cradle, to be strong, intelligent, virtuous, and noble. From Berne came a father and son, who both dedicated themselves to the calling of teacher, and came into the school to better prepare for the work. One day, an educated young man from Bremen stood full of surprise before a little lime-burner, who was sorting out chalk from a quantity of pebbles thrown up by the rushing Emme. When asked what he saw so remarkable, he answered: "This boy makes me ashamed; after seven years of the study of natural history at school I could not pick out the chalk from the other stones, because they gave us nothing but names and descriptions, never the real things." I could tell you—but no—no more now! I should never end, were I tell to you all that made a never-ending impression upon me, and that broadened, deepened, and enlightened my life at Burgdorf. Yes, dear sons, there my childhood and youth were newly created; there I found a second father; a new and larger family circle surrounded me, in which I was unspeakably happy. Like a child, did I enter the school of human culture, to make its strength my own. Nature everywhere had a new charm and life for me; for man first sees and hears when his understanding is enlightened. I enjoyed in high degree the blessing of a hearty confidence and an intimate friendship, which still makes happy the evening of my life, and which will ever give the inspiring consciousness that not in vain I lived in Burgdorf."

This narrative is so perfect in its epic simplicity that any remarks will mar its artistic effect. Still, in these historical studies, we wish to show the pedagogic content of any historical fragment or narrative, and this must excuse addenda, which, like all historic interpretations, have, after all, but temporary value. But each generation demands these temporary values in thought as its own means of progress.

We see in this narrative the story of the beginning of a world-wide revolution in educational method, and, when we analyze it, to

see by what means the impulse is given, we observe the following phenomena:—

1st. A man, Pestalozzi, absolutely devoted to and believing in his ideas, and disseminating them by popular writings of simple style and content.

2d. A little group of young men who admire and believe in him, each having previously arrived at similar ideas of his own.

3d. An atmosphere of human love.

4th. Conditions of the greatest poverty, simplicity, and even ignorance; in fact, a return to almost primitive life.

5th. A period of great disturbance in the whole social life of Europe, in the midst of which great tendencies appear, with which the ideas of Pestalozzi and his circle harmonize.

Each of these phenomena plays its part in reaching that result described by Pestalozzi as *turning the European school-wagon around into a new road.*

1st. The personality of Pestalozzi was necessary. That supreme faith in his ideas, past all poverty, treachery, skepticism, and ridicule, through long years, corresponds in the biologic world to that long-continued mother-love which nourishes the child through years of weakness to manhood. This strong, faithful personality is the first element of moral success. Suppose Pestalozzi had cared for money!

2d. This personality required expansion through others, and in human society this expansion must always be found through young and loving natures; natural tendencies naturally combine, through admiration and sympathy, with the same tendencies in a hero and leader. Suppose these young men had cared for money!

3d. Burgdorf grew and flourished in an atmosphere of human love. Its children were snatched from calamity by unselfish philanthropy; Krüsi was developed through the kindly interest of Steinmüller, Fischer, Pestalozzi, Grimm, and Eschen von der Linth; Buss and Tobler gave their services primarily for love; and in Pestalozzi we find no other master motive. Suppose they had worked to make their institute the leading school of Europe!

4th. The primitive personal conditions of the group gave them freedom. In a school independent of church or state or patrons, with children torn from every ordinary tie, with assistants unprejudiced by the set training of the older schools, Pestalozzi had

a free field for his experiment. Suppose he had worked in a school connected with a system or with men who knew!

4th. All these phenomena appeared in a period when society, broken away from its moorings, was searching for some nearer way to reality than it had known before. For this Pestalozzi and his friends were also searching with all their hearts, and society was just at the point to accept what they so well could give. Moreover, printing had been invented; so that the ideas and even the personality of Pestalozzi were carried to his own all over the world. Suppose Pestalozzi had been born in Switzerland in the days of Cæsar!

We therefore see how each element in that combination of personality, invention, personal connection, and historic circumstance entered into the sum-total of influence which has swept through the schools of the century.

Only by attending to the real do men achieve the real.

MARY SHELDON BARNES.

Studies in
Education

VIII.



STUDIES IN EDUCATION

EDITED BY

EARL BARNES,

Professor of Education in Leland Stanford Junior University.

FEBRUARY, 1897.

	PAGE.
THE CHILD'S ATTITUDE TOWARD PERSPECTIVE PROBLEMS — Arthur B. Clark	283
STUDY IN REMINISCENCE: VII. WHAT DETERMINES LEADERSHIP IN CHILDREN'S PLAYS — Clara Vostrovsky.	295
A LITTLE GIRL'S LETTER	297
DISCIPLINE: VIII. GENERALIZATIONS — Earl Barnes	299
BOOKS AND PAMPHLETS INTENDED TO GIVE SEX-INFORMATION — Earl Barnes	301
THE DEVELOPMENT OF PERSONALITY IN CHILDREN — Edward Howard Griggs	309

VOL. I.
No. 8.

STANFORD UNIVERSITY.
1897.

\$1 a Year.
15 c. a Copy.

STUDIES IN EDUCATION.

These studies begin with July, 1896. They will be continued as a monthly publication for ten numbers. The last number will contain an index, and a full table of contents. The cost for the year is one dollar, or fifteen cents a number. Address all inquiries or subscriptions to

EARL BARNES,
Stanford University,
California.

Entered at the Post Office in Stanford University as Second-class Mail Matter.

THE CHILD'S ATTITUDE TOWARD PERSPECTIVE PROBLEMS.

ARTHUR B. CLARK.

This study was made to find out the attitude of children toward perspective problems as applied to objects before them.

An apple with a hat-pin stuck horizontally through it and turned at an angle to the observer, was one test object. A book, side down, and also at an angle, made the second. These objects were so arranged that they could be seen from but one direction, and were drawn independently by the pupils of four schools. In none of these schools was drawing taught enough to have much effect on this study.

The drawings here shown are selections from the ones made; but they are smaller, and do not show the life and character of the originals.

The drawings of the apple itself, apart from the pin, may be arranged into the three following groups:

Group "A."—Two hundred and five drawings such as 1 to 8 inclusive, which resemble any apple as much as the one used as model. Many of these drawings show features which the model did not present; as the stems of numbers 5 and 6, or the little tuft for an eye of number 2, and "the root" in number 8. These things were known to be there, and so were drawn; as the boy who drew 8 said: "You can see the root of an apple if you cut it in two." Number 6 is a drawing which the child had made many times when she thought "apple," and so she drew it this time when she saw one. In number 7, we see an attempt to represent the solidity of the apple.

It is certain that many of this group were trying to represent something else than visual appearances, and in all cases the visual qualities of the model formed a small element of the composite idea from which they drew. The other elements of that idea being their knowledge of apples as realities, and the drawings they had previously made or seen of them.

In this group symbolism predominates; that is, they saw an apple and drew as much or little as would *stand for* one.

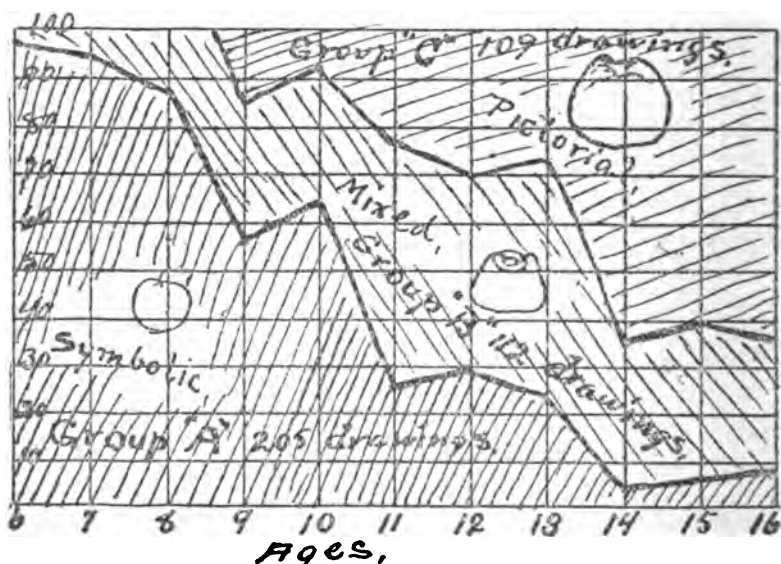
Group "B."—Consists of 112 drawings, in which both symbolism and signs of direct imitation are present; such are drawings 9 to 15 inclusive. In 10, 11, 13 and 14, the contour is drawn from the apple, but the detail of the eye is symbolic. Number 9 is a remarkably good drawing of the section of the apple, as may be seen by comparison with 18. Here the observation of certain facts was close; the child knew just what the shape of the apple really was, but she could not represent those facts in perspective. The child who drew 12 had been taught to make smooth, even circles, and so the idea of "finish" occupied her attention, rather than close observation of the irregular contour of the apple.

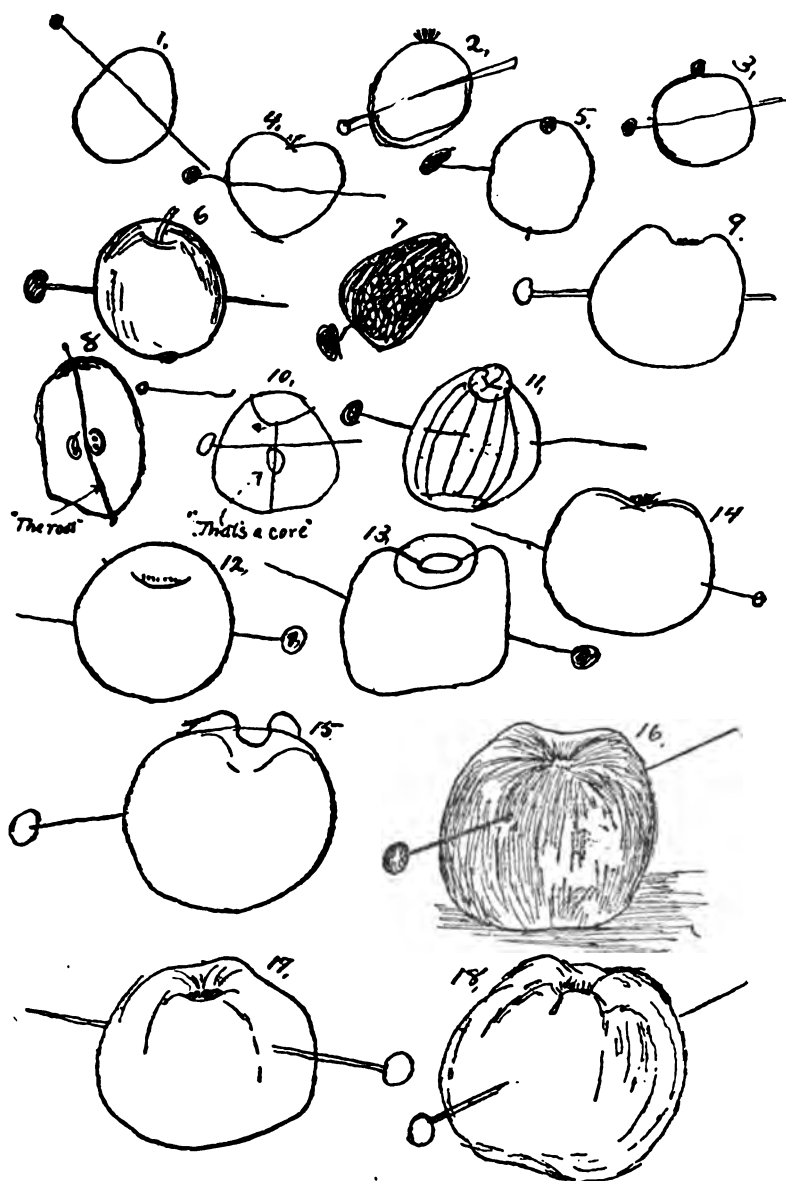
The symbolism of this group arises either from careless seeing or lack of perspective knowledge. (The comparison between such a drawing as 10 and the composite head, on page 22, No. 1, of these studies, is striking).

Group "C."—Consists of 109 drawings, like 16, 17, and 18, which attempt to represent the apple as it appeared.

These results without more study mean little; but tabulated according to the ages of the pupils making them and the numbers at each age, they become significant.

CHART OF THE APPLE.





Now, it is seen that symbolism is predominant at the age of six, and almost nothing at fourteen. Partial observation is found at all ages, but predominates at eleven to fourteen; while from fourteen on sixty-two per cent. of the children made successful pictorial drawings, and thirty-two per cent. made drawings partially pictorial.

This grouping of the apples is a matter affected by individual judgment. Another collator might show other percentages; still the differences in the drawings is too marked to make much difference in the general results.

A study of the drawings of the pin admits but one collation, as, with two or three exceptions, it was drawn in but three ways:—

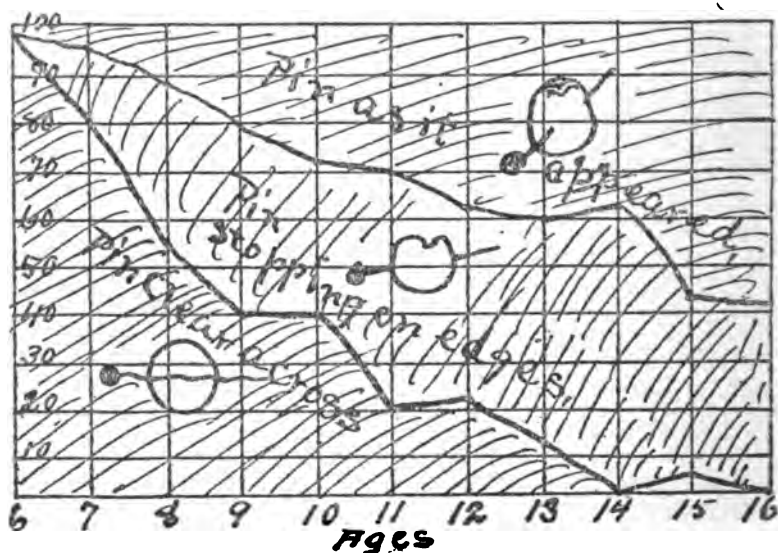
One hundred and thirty-seven drew it clear across the apple; as in 1, 2, 3, 4, and 10.

One hundred and fifty drew it to the edges only; as in 9, 12, 13, and 15.

One hundred and twenty-one drew it as it appeared; as in 16, 17, and 18.

Again, to make these results significant, they need to be studied according to ages, as follows:—

CHART OF PENETRATION OF THE PIN.



The six-year-old does not notice that part of the pin is out of sight, or does not draw it so if he does; because he is trying to show not appearances but facts. The pin goes through the apple, and he draws it so.

Later it occurs to the average child to express the fact that the part of the pin in the apple is out of sight; so he does it in the easiest possible way, namely: by making a sectional drawing, like 9,—just such a drawing as a mechanic would make to express a similar fact.

Many people, I am convinced, remain in this diagrammatic stage of representation, chiefly because as children their development was arrested, and later they lack the courage to experiment enough to develop beyond it.

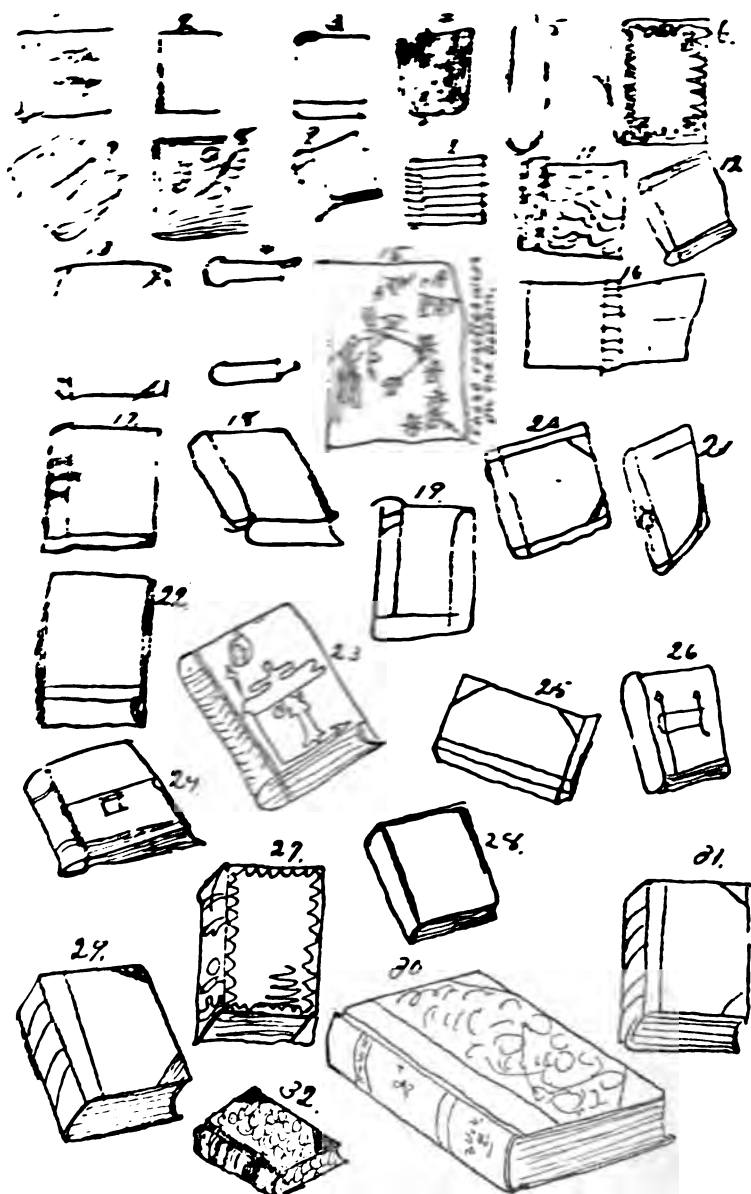
According to the chart, however, at the age of fifteen, fifty-eight per cent. of the children tested were already beyond it, as far as the drawing of the pin shows. They expressed the exact visual relations of the apple and pin as they appeared from their point of observation.

Why do not the six-year-olds draw things as they appear by the unconscious power of imitation, for which they are famous? This question has puzzled many wise people. *The facts are they draw things as they are known to be, not as they appear*, whatever theory may say to the contrary.¹ Being sure of this fact, a theory for it may be ventured:—

Since the age of beginning to handle things, the child has had to pay penalties for mistaking appearances for facts, and has been rewarded for inferring the real use to him of things from their appearances; hence, when he sees a thing he immediately thinks of its facts of form, or taste, or feeling,—anything but its abstract visual qualities. He has not been paid for attending to these until he tries to draw, then he slowly learns to attend to how things look from single points of view.

In the early stages of drawing, the child speaks about his ability to make “good apples” or “good men,”—later, about “drawing an apple to look like that apple.”

¹ The apparent exceptions which seem to favor the theory of imitative drawing are either those cases where the object is so far away, or in such a position that the use of perspective is not needed in drawing it, or the child is precocious and not an average case.



DRAWINGS OF THE BOOK.

A book lying corner-wise on a table is a hard drawing model for any one unfamiliar with the subject; still, for that very reason, it made a good test object in studying the stages of progress of children in perspective.

Four or five different books were used, but many more varieties of drawings resulted, from which the accompanying have been selected. Numbers 11, 20, 25, 29, 30, 31, and 32 are very dissimilar, yet they were made from the same book, from the same position; the differences in the drawings are due to differences in the people making them.

It is noticeable that nearly all show the largest side of the book and with square corners. The exceptions are: Number 5, which shows an end; four or five like 7 and 8, with one side open; and about ten like 30, with acute side angles.

A few show nothing but this largest side, many add a line for the back, while many drew more sides than were in sight. A few drew an open book, like 16. None of the books were in perfect perspective, nor in full light and shade. About a third drew some part of the surface markings, or filled in the sides solidly, like numbers 4, 6, 23 and others. In many instances, like 6, some portion of the decoration is well done and the rest completely ignored; more frequently a fragment of the decoration was enlarged to fill the whole space (see number 8). It was also noticeable that the largest per cent. of those drawing decoration were below the age of nine.

The differences in grasp of form are many, but they may be gathered into three general groups as follows:—

Group "A."—The drawings which show the wrong number of sides, or a side out of sight, as 1 to 16 and others.

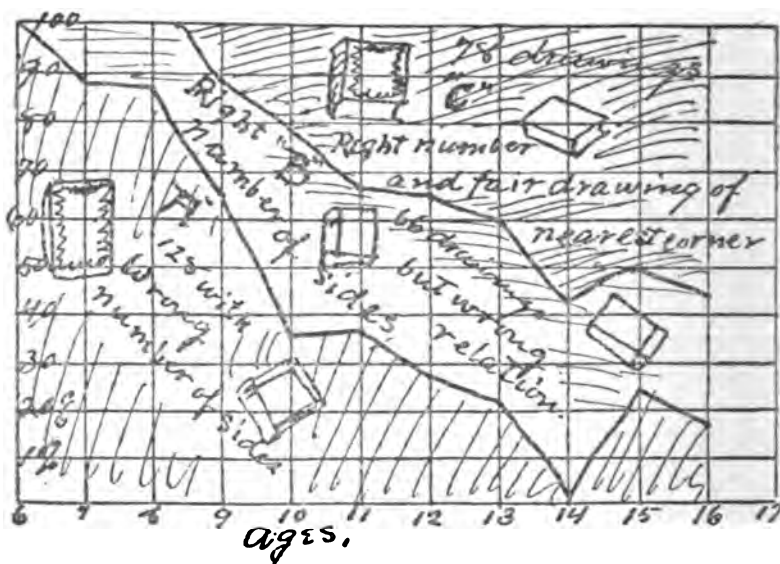
Group "B."—The drawings which show the right number of sides, but not so arranged as to express clearly the solidity of the book; such are drawings 17, 18, 21, 22, 23, 24, 25, and 26. (While these differ among themselves, they are distinct from all others in the drawing of the nearest corner, which affords the best distinction between this group and the next.)

Group "C."—The drawings which show only those sides which were in sight, and the right relation between them, as shown

by the fair drawing of the nearest corner. Numbers 27 to 32, inclusive, are in this group.

Arranged in order of ages, for the purpose of seeing the probable order of development of a single individual, they appear as follows:—

GRASP OF FORM OF THE BOOK.



The position of the book was shown in but two ways; either upright, like 1, 2, 3, etc., or slanting, like 7, 20, 23, etc.

Distributed according to ages, the results are as shown in the following chart:—

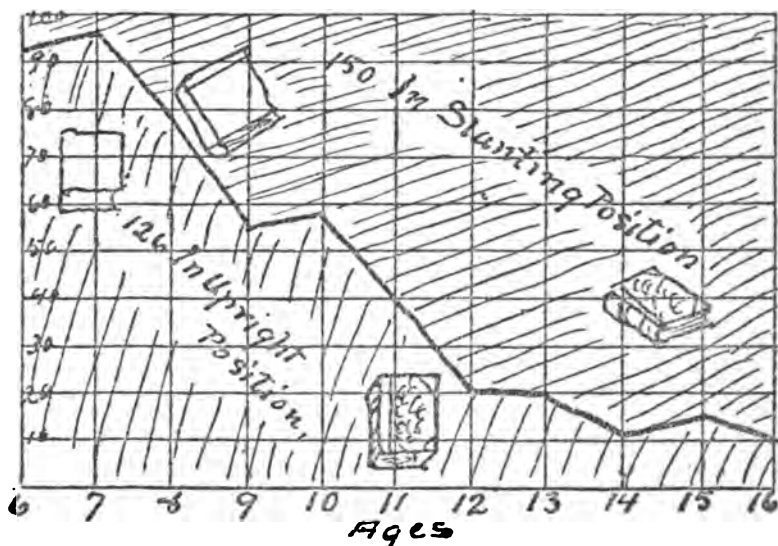
This chart is in the same general line as the others, namely: The diagrammatic drawing is done by the young children and the pictorial drawing by the older ones.

A study of the drawings and both of the above charts shows that the progress of the average child is about as follows:—

At six to seven, the child attempts neither to show the position of the book before him nor the exact number of its sides, nor their relation, nor its complete scheme of decoration, but simply a book with samples of some or all of these essential and accessory details

as suggested by the book before him. Usually he chooses well the fragments which will stand for a book, as the largest side, and if anything more, an indication of the back. But whatever is drawn, is drawn, as a rule, with decision. See number 1, with its condensed title and 8, on which the daisies have been drawn, each with a single stroke.

SLANTING OR UPRIGHT POSITION OF THE BOOK.



They do not seem to think of expressing the slanting position, or in fact any position; so they draw it parallel to the sides of the paper, impelled, no doubt, by a sense of order. About half at this age drew some kind of surface marking, a little bit of the book's decoration, like 6, 8, 11, and others merely marks, like 4 and 7. In book 11 the marbled paper is made to fill the whole top and back; although it was as shown in 30, the child became absorbed in drawing it, and kept on until the whole space was filled. Number 15 is a graphic exposition of fragmentary thinking; the letters are distributed promiscuously, part of the ornament was on the back, the rosettes were in a row along the bottom of the cover. The case is an exaggerated one, typical, but not average.

Later, say at about eight, begins an attempt to draw what is done at all, completely, as a whole. The position of the book and its form, as shown by its number of parts and their relation, is attempted.

At nine, the chances are forty-five in one hundred that the average child will draw the top slanting, and only thirty-five in one hundred that he will draw the right number of sides, and but ten in one hundred that he will draw the front corner correctly. Although he makes a tangled mess of these things at first, still he makes steady progress, until at fourteen he has mastered the number of sides, and half the time their right relation, and eighty-nine times in one hundred the slanting position.

The problems of form take attention from the decoration; so less of it is drawn.

From fourteen on, a few go backward, but most improve. The top of the book may become flattened into a parallelogram with acute side angles, like 30. The surface markings are omitted entirely, or drawn consistently in relation to the space they occupy. Drawings 27 to 32, inclusive, are representative of this class. In none of the drawings is the top sufficiently fore-shortened, nor are the receding parallel lines made to converge toward vanishing-points. Still the facts of the book's appearance are well expressed and show a healthy state of development.

Are these drawings of the apple and book indicative of the children's real power in drawing similar objects? Or would they, if tested again, draw differently? I am convinced that the same results would be reached again by a similar test on similar children; but I regret that the number tested could not have been larger and representative of more conditions.

To find out how fixed they were in their peculiar ways of drawing, a second test was made a few weeks after the one here given, as follows: Six or eight drawings of the apple were enlarged from the children's drawings of them and as many of the book; these were placed before a part of the children who had made the first drawings, and they were asked to select the ones which looked most like the objects they had previously drawn, to write their numbers, and then to draw them again.

The result was that a great majority *chose* the best drawings, but *drew* very much as they did the first time. Of the eighty

tabulated, fifty-one per cent. drew apples of the same class as their first ones; thirty-one per cent. were autographic copies of their first drawings, as numbers 7 and 15; forty-three per cent. made better drawings, with a correct drawing before them.

Of the book, seventy per cent. made no improvement over their first ones, many made autographic copies (as number 4, for example); thirty per cent. made drawings which were better, but usually only slightly so.

Many other studies might be made in the field of natural forms, of ornament, of things near by and far away.

As to any general deductions to make from this study, I can say nothing which Professor Barnes has not already said in his study based on the "Johnny pictures."¹ This study merely emphasizes the statements there made as applied to object drawing.

Some important facts concerning perspective which this study seems to show are:—

1. All children have considerable power of graphic expression, —probably more than teachers usually think.

2. Perspective is not a simple subject which a child can master in a few lessons, by the help of a few precepts, but it must be acquired slowly through certain definite stages, at each of which the child will stop persistently and stubbornly until ready to develop beyond it.

These stages as indicated by the book are: First, symbolism; second, the expression of three dimensions; third, the fore-shortening of areas and distortion of angles; fourth, the convergence of receding parallel lines. Whether a child is taught much drawing or not, he tends to pass through these gradations.

3. The mental process of drawing seems to be: Looking at a thing to see what it really is. Next, pondering those facts in the mind. Then drawing or creating out of the mind, as the reason dictates, something which will express those facts. This operation of the reason is always necessary; it may be automatic, or take the form of imagining the objects to be projected on a flat plane. With the young child the visual facts of an object are not part of the facts concerning it which he ponders when he tries to draw it.

It is not reasonable to suppose that a child can develop beyond an elementary conception of drawing without a chance to experi-

¹ *A Study on Children's Drawings.* By Earl Barnes. Pedagogical Seminary. Vol. II, No. 3.

ment, and so to learn what the shortcomings of his art are. The above pupils did most of their experimenting voluntarily.

The least, and possibly the most, a teacher can do is to see that the pupil has plenty of exercise in doing such drawing as he is able to do well (according to the child's standard), and so not allow power to waste through disuse; but to make it rather a familiar language of expression for the child to use readily and freely in telling and pondering about the world around him, whether it be in the form of geography, history, nature material, or concerned with his own activities.

Such problems should be given that the pupil will not struggle unprofitably and so be discouraged, and also so chosen that the successive steps of natural progress, along the line of least resistance, will be suggested but not enforced.

Systems of drawing, based on any single idea which does not include the child's whole power of graphic expression of life as it appears to him, are failures.

STUDY IN REMINISCENCE.

VII. WHAT DETERMINES LEADERSHIP IN CHILDREN'S PLAYS.

CLARA VOSTROVSKY.

From my seventh to my eleventh year I lived in a little Nebraska village, where from my eighth year at least, I was the unquestioned leader of my schoolmates in all their games. I did not take this position by force; it came to me by what are, in the realm of childhood, natural rights. My recollection of the beginning of this leadership is connected with a concrete instance. Some of the girls had organized a play, which they named "The Travelers," really a modified game of "Follow the Leader." It looked most alluring to those of us on the outside, as we watched the little band walk or run, or swing their arms simultaneously; so I joined. But appearances had been deceptive; it was in reality very stupid. The leader lacked inventive power, and the same things were repeated over and over. I deserted, and formed a company of my own. The originators laughed at our following their example, but soon found in us rivals to be respected if not feared. I had considerable inventiveness, and at once introduced all sorts of new and appealing things into the play. There was little, if any, repetition of action; hence there was no wonder that the new band grew, and that daily more and more deserted from the old, while outsiders became eager to enlist. Perhaps one secret of my power lay in my enthusiasm, which spread, as enthusiasm will spread, to all the members. It was not a play to me; it was reality. I was a commander, and these were actually my "men." Light in weight, sure-footed and steady-headed, I held my place, too, as Robin Hood held his with his arrows, because I could do things few, if any, of the others would have dared to do without my example. Much of our play was along the banks of a steep creek which ran through the schoolyard, and here I would often risk conducting my company along the very edge of the slippery, muddy

brink, or take the lead in jumping across a wider place than even taller and stronger children liked to attempt.

Probably one reason why there was no ambition, among my best followers at least, to hold the first place, was because of a certain justice on my part—an unreasoning justice, like that of nature, which, nevertheless, seemed to appeal to all the children alike. It made no difference if the one who missed was my best friend, my best “man,” or my worst, the penalty was the same. There were no extenuating circumstances; it did not matter whether she had fallen, or slipped, or tripped; if she did not do what I had done, in exactly the same way, she had to take her place at the foot of the line. No objections were ever raised. That was the law, and had to be obeyed. Besides, of all my company, my cleverest followers were probably my most contented ones. I was decidedly appreciative; it gave me real pleasure, which I freely showed and expressed, to have them attempt and perform some risky or difficult act. This appreciation strengthened the friendship between us, so that, knowing how I counted on them, they would have been the first to repel any rebellion in the ranks. My justice, on the other hand, prevented the more timid ones from complaining. Had there been, despite this, aspirations or complaints, probably my imperiousness, which did not admit even the possibility of a serious rebellion, would in itself have speedily quenched them.

Just before we moved from the village, a girl somewhat older than myself moved into our neighborhood. She had traveled to quite a large extent and had spent much time in several large cities. She knew considerably more than I did; among other things several new games, to which she introduced me, and into which she herself entered, full of spirit. She was, besides, decidedly self-willed. I at once became her follower, just as I myself had before had followers. And, while I bowed down before her overmastering will and superior knowledge, I was just as happy as I had been when I puzzled my head to meet the caprices of my own company in a satisfactory way. She never, however, appealed to so many as I had done, perhaps because she could not appeal in so many different ways.

So, to judge from my own experience, the things that determine leadership among children are not very different from those that determine leadership among men. Imagination, the power to

place attractive images of some kind before the mind, is one element no one will dispute. A strong will, one that seizes hold of every opportunity to have its way, is another. Belief and enthusiasm in a cause bring followers, naturally. Superiority in power to do does the same. Then there must be the element of justice, whether real or fancied, towards one's followers. And, lastly, there must be appreciation of those who do their part, an appreciation not unlike that which made Napoleon loved and obeyed by his officers. All of these elements need not appear in one child-leader, as they seldom do in the men and women who lead in life. But as there are many different kinds of leadership, the elements that do appear may help to determine the kind of leadership that shall exist.

A LITTLE GIRL'S LETTER.¹

"Dear Mama—I hope you are well I am, Dorothy is mutheter I am glab we went up the monten yeshdy the incline is lovly I no you wod like it ol the more that i think of it there is a nice hotell and there is alagter and a litle gary anmell that i dont no the name of and a monkey by the name of jaco and to owls and a litle garw skuyel and a wild cat and to gots and to dear, and then comes the Bear, a a man was fixking som pips and the Bear stod on a hogh head and bagen to box his fot he bit his hand but not badly and then the man went downen into the pit to reslol with him i shod not like to go downen in there the man put him in the hogshead of water and then the man came up the lader and the Bear came up to the mane had to go downen agen and the Bear came to and then the man thruw the Bear downen and ran up the lader and puld it up Grace got some fotrgrafs and then we rod downen the incline standing up it was grate fun i woke up, in the morning with Dorothy coling me i sed why Dorothy it is pitch darke and I trende over to loke at her when i fond that it was 7 o'clk and then i fond that the bed cloth had bin over my hed i lafed at my self I send you my love."

—*By a girl nine years old.*

¹ Reprinted from the Pacific Educational Journal, July, 1895.

COMMENTARY ON THE LETTER.

How far shall we try to have children use correct forms in talking, writing, spelling, drawing, and composition? This is one of the most difficult problems in practical education; for it involves the paradox that emphasis on the letter killeth the spirit, and yet the spirit cannot live without the letter. The girl who wrote this letter was brought up with almost no school experience, and with very little attention to form in any way. The letter she writes seems to me delightful; she takes her mother into the very heart of her life, tells of their friends, of her experiences out in the world and in the domestic circle, and sends assurances of love. What more could one ask? But even more marked is the vital, concrete, picturesque quality of the letter. The girl is letting her soul shine out. If she knew that she should find in her mother a critic of spelling, punctuation, and grammar, she could not write in this way. "Wrestle" would be too hard and she would drop the bit of description; the direct quotation in the last part would be omitted on account of difficulties of punctuation. The arts of expression are mastered only by expressing, and in each of them one must pass through a period of blundering before he comes out into the field of perfect mastery. One must learn to write as one learns to walk or talk—and that is by walking and talking. The pedagogue can help most by providing incentive and then by keeping out of the way. His aid must come, here a little and there a little—but never so as to attract attention from the doing to the form. Unfortunately, under our system of mass education, we demand and need some quick and easy measure of intellectual stature—and it is easy to measure the forms, and very difficult to measure the spirit. Our school teachers must prepare for examiners—or still worse, for the criticism of the teacher who is to take the children from her hands into the next grade, and so, largely from fear of one another—for we teachers are the worst and least reasonable critics of teachers—we spend our days teaching a child how to write "rite" right—and thereby destroy his ability to grow by going out through expression.

E. B.

DISCIPLINE AT HOME AND IN THE SCHOOL.

VIII. GENERALIZATIONS.

EARL BARNES.

In working out generalizations from tables of figures, one may simply glance across the lines and trace increase or decrease, or he may compare different lines, or he may unite lines of common tendency so as to get larger averages.

For instance, look at Chart I in the last number of these *Studies*. Take the boys who report the parent as giving an unjust punishment; the series runs from eight years to sixteen years: 45, 50, 22, 21, 26, 28, 18, 10, 16. This is a decided decrease with advancing years. The girls show the same decrease, and if you add the boys and girls, and divide by two, you get a series representing the total number of children, which runs: 45, 41, 28, 26, 27, 23, 20, 12, 18. Now, instead of one year as the unit, suppose we take two years as the unit, adding the eight- and nine-year-old children together, and dividing by two, and so with the other ages, we have: 43, 27, 25, 16, 18. With the massing of our data in larger and larger groups, we get a more clearly marked tendency, with less variation for the separate ages.

Applying this method of generalization to the tables printed, we reach the following conclusions:—

THE PUNISHER.

Injustice is charged up about equally to parents and teachers. (See right-hand column—Total.)

Young children give most of their instances of injustice from parents, but give less and less of home cases as they grow older.

Older children give most of their cases of injustice from the school.

Hardly any children confound cases of reactions of nature with punishment.

Cases of usurped authority are seldom cited.

There is little difference between boys and girls.

PUNISHMENTS RECEIVED.

The common form of punishment cited is whipping.

Whipping (with shaking, striking, and slapping), confinement, and scolding, are the forms of human reaction that the children understand and recall as punishments.

The number of whippings mentioned decreases as the children grow older.

The highest form of punishment (correct the harm) is seldom used with our children, or else it is not looked upon as punishment.

Boys mention more whippings, but are less often confined or scolded.

OFFENSES COMMITTED.

The most common offense is general disorder.

One-quarter of the offenses are negative in character.

Of the active offenses, a large proportion may be misdirected energy.

Few children mention offenses against the Ten Commandments.

REASONS WHY UNJUST.

One-quarter of our children have had no unjust punishment that they can recall.

One-quarter of those who have had unjust punishments have only a vague feeling about it; they give no reason.

Nearly half of those who give a reason claim to be innocent of the crime charged.

One-quarter claim irresponsibility.

One-fifth object to their trial or the kind of penalty received.

One-tenth dare to set their own judgment in opposition to that of their judges, and declare their acts to have been right.

BOOKS AND PAMPHLETS INTENDED TO GIVE SEX-INFORMATION.

EARL BARNES.

With the advance of civilization to a point where few of us ever feel compelled to struggle for mere subsistence, the sex-instinct becomes the most important single element in determining human activity. This instinct becomes operative much earlier in life than we generally suppose; it certainly begins to play a part in the lives of some children when they are three or four years old. With the high premium placed by Anglo-Saxon civilization upon negative virtue, it is a deep-seated principle with us to avoid all reference to this element in our personal and social life; and with children especially, we treat this side of life as though it did not exist.

Recently, however, there has appeared in America a considerable body of people who advocate giving children some sort of sex-information. In the National Educational Association at Saratoga in 1892, the writer presided over a round-table discussion on the development of ideas and feelings of sex in children. The results of that discussion showed that school men and women hold four or more distinct beliefs concerning the problem of giving children sex-information. One considerable group would keep the child in as perfect ignorance as possible, fearing to rub off the bloom of innocence; a second would give absolute information concerning all that a child wants to know; a third did not know what to do, and would do nothing except through spasmodic interference; while a fourth class would follow the physical and mental development of the child, giving information when he is able to understand it and assimilate it into life.

Those who favor giving sex-information claim that the child needs such information both for protection and for intelligent choice; that secrecy in these matters strengthens morbid curiosity, leading the child to gain obscene information for himself, and that protection cannot be made complete enough to prevent this. On the other hand, it is said that if information is given before the child has

developed physically and mentally to the point where his sex-consciousness enables him to understand what he is told, it is not information that he receives, but a mere external knowledge of facts out of relation to life. Concerning the need of such information, Hermann Cohn, who has spent his life in the study of school hygiene, says he is convinced that all the other causes of school disease and disability combined would not equal the trouble caused among school children by sexual misuse.¹

So it has come about that many books and pamphlets have been prepared to give children sex-information. This information is prepared in every degree of dilution. Sometimes it is to be given to the child directly; sometimes through the mother or nurse; sometimes through the father; sometimes more indirectly still through the family medical adviser. Sometimes it is presented in alluring terms of sex-perversion in the interest of a patent medicine; sometimes involved or merely suggested in religious, moral, or philanthropic exhortations; sometimes in bald scientific accounts of anatomy and physiology; sometimes in "familiar talks"; sometimes disguised in stories or verse.

Much of this literature is dominated by the wish to protect children and young people, and its tendency is to treat the sexual function not as a purely normal and healthy activity, but as some evil tendency implanted in human beings for their undoing. They therefore insist upon the most negative of the different ideals of sex-relations, that one which is the direct result of the tradition of necessary impurity in them, inculcated through centuries of history. Such teachings produce opposite results in two classes of persons; those who accept the ideal theoretically, and fail to live up to it, suffer from a sense of moral degradation which weakens the character; those who are somewhat negative in sexual instinct may accept it so entirely that they come to have a view of the intimate relations of life which makes mutual understanding and harmony in marriage extremely difficult.

It is an esoteric literature, formerly furnished by obscure publishing concerns, but now appearing from such high-grade publishing houses, as McClurg & Co., and Dodd, Mead & Co. It is impossible to classify this literature, but there is one marked

¹*Was kann die Schule gegen die Masturbation der Kinder thun?* By Hermann Cohn. pp. 40. Berlin. Richard Schoetz. 1894.

characteristic that runs through it all. This was expressed by Dr. John P. Reynolds in an address, in 1890:—

“We hear it urged that much sexual evil is due to ignorance, and it is gravely proposed to make the world more pure by explaining the structure and use of the reproductive organs to children at school. Obviously, two very diverse matters are here hopelessly confused,—pregnancy and child-bearing, and a knowledge of sexual relations. In fairly large families the birth of children, the coming of nieces and nephews, the unavoidable incidents of daily life, give to the young under the gentlest and kindest teaching ample acquaintance with reproduction. It is far otherwise with the relations of the sexes. Curious interest in that subject will only be set at rest by the sexual relation itself.”¹

This seems to me profoundly true. Children and ignorant people are interested, not in processes of reproduction, with which these books and pamphlets mainly deal, but with sexual relations. To prove this, one has only to glance at the forbidden literature prepared for such readers, to listen to the talk of a vulgar crowd, or to recall his own early curiosity. Shall we give this information to children? This article in no way answers the question; it simply presents a descriptive and critical bibliography of a growing and influential literature, of which all teachers and parents should know something. The titles are arranged in order of importance, according to the judgment of the writer, though other judges would, of course, place them differently. The first four titles are monographs on the general subject and perhaps throw some light on the question of giving sex-information to children.

Key, Prof. Axel. *Die Pubertätsentwicklung und das Verhältniss derselben zu den Krankheitserscheinungen der Schuljugend.* pp. 66. Berlin. August Hirschwald. 1890.

A valuable and learned monograph, giving the results of extended quantitative studies on this most difficult period of development.

Cohn, Hermann. *Was kann die Schule gegen die Masturbation der Kinder thun?* pp. 40. Berlin. Richard Schoetz. 1894.

A plea for an exact quantitative study of sexual pathology among school children, accompanied by some preliminary generalizations, based on general observation.

¹ From the *Gynecological Transactions*, Volume XV, 1890.

Burnham, Wm. H. *The Study of Adolescence.* Pedagogical Seminary. Vol. I, p. 174.

A valuable study, largely based on data gathered by Dr. Burnham and on literary reminiscences.

Barnes, Earl. *Feelings and Ideas of Sex in Children.* Pedagogical Seminary. Vol. II, p. 199.

A general statement of the problem of sex in education.

Wilder, Burt G. *What Young People Should Know: The Reproductive Function in Man and the Lower Animals.* pp. 212. Boston. Estes and Lauriat. 1875. Price, \$1.50.

This is a clear scientific treatment, anatomical, physiological, and hygienic, of the sexual organs and their functions, written by one of the foremost biologists in this country. For many years Dr. Wilder has given to the graduating class of Cornell University a lecture on this subject. His treatment is direct and simple, free from all grossness and all maudlin sentiment. For those who believe in leaving the subject alone until young people reach mature years this book will prove satisfactory.

Warren, Mortimer A. *Almost Fourteen. A book designed to be used by parents in the training of their sons and daughters for present modesty and nobility, and for future fatherhood and motherhood.* pp. 131. New York. Dodd, Mead & Co. 1893. Price, \$1.00.

The tone of this little book is clean and healthy throughout. In brief compass it presents as much physiological information as a boy or girl of fourteen could use, and presents it in a setting of sentiment that would appeal to any unspoiled boy or girl. When the book appeared it aroused a storm of protest, and the first edition was sold in a few days. Some simple plates were omitted in latter editions and the information toned down. It is nominally intended for parents, but written directly for children, and evidently meant to go into their hands.

Morley, Margaret Warner. *A Song of Life.* pp. 155. Chicago. A. C. McClurg & Co. 1891. Price, \$1.25.

———. *Life and Love.* pp. 214. Chicago. A. C. McClurg & Co. 1895. Price, \$1.25.

Miss Morley is a teacher of biology, and has here presented the subject of sex to children in connection with the reproduction of life in organisms from the lowest plant to the highest animal forms. Her books are charmingly written in a poetical vein, and her science is accurate. The illustrations by the author are artistic and sympathetic with the text. The first book

gives hardly any direct information concerning the physiology of sex for an inquiring boy or girl; but the analogies are very suggestive. The next book is intended for older readers, and is more direct, but still truth is expressed mainly in poetical allusion.

Allen, Dr. Mary Wood. *The Marvels of Our Bodily Dwelling. Physiology Made Interesting.* pp. 275. Ann Arbor, Mich. Wood-Allen Pub. Co. 1895. Price, \$1.00.

An elementary physiology, or rather hygiene, written in symbolic form, broadly preparatory for sex information. Like all of Dr. Allen's work, it has a clean, sympathetic quality that commands respect.

Allen, Dr. Mary Wood. *Almost a Man.* pp. 39. Ann Arbor, Mich. Wood-Allen Pub. Co. 1895. Price, 25c.

A sympathetic little book for boys, giving some direct information, with a good moral feeling.

Allen, Dr. Mary Wood. *Child-confidence Rewarded.* pp. 19. Ann Arbor, Mich. Wood-Allen Pub. Co. 1895. Price, 10c.

A plea for giving children information concerning reproduction, with a helpful type-talk.

Allen, Dr. Mary Wood. *Teaching Truth.* pp. 24. Ann Arbor, Mich. Wood-Allen Pub. Co. 1892. Price, 25c.

A plea for sex teaching, with helpful suggestions.

Allen, Dr. Mary Wood. *The Mother's Friend.* A monthly periodical devoted to the interests of the home and the welfare of the race. Afterwards changed to *The New Crusade*. Ann Arbor, Mich. Wood-Allen Pub. Co. 1895-97. Subscription, 50c.

Contains articles intended to assist parents in instructing children in matters of sex.

Sperry, Lyman B. *Confidential Talks with Young Men.* pp. 179. Chicago. Fleming H. Revell Company. 1893. Price, 75c.

A sensible presentation of the special problems of sex-life. A good deal of physiological information is given, and a good deal of space is devoted to abnormal activity, presented with a view to arousing fear.

Sperry, Lyman B. *Confidential Talks with Young Women.* pp. 160. Chicago and New York. Fleming H. Revell Co. 1895. Price, 75c.

A companion book to the one for young men.

Graham, Sylvester. *A Lecture to Young Men on Chastity.* pp. 246. Boston. George W. Light. 1838. Fourth edition.

This book is of interest historically, as showing how early the subject received public attention in our country. It is a very intelligent presentation of the facts of sexual life in the form of an exhortation to virtue.

Trall, R. T. *Sexual Physiology and Hygiene; or, the Mysteries of Man.* pp. 344. New York. M. L. Holbrook & Co. Price, \$2.00.

This is an extended physiology of sex, intended for popular reading. The intent of the author to make it popular and interesting is obvious.

Shepherd, Mrs. E. R. *For Girls: a Special Physiology.* pp. 225. Chicago. Alice B. Stockham & Co. 1882. Price, \$1.00.

This is a direct, popular series of talks on the hygiene of sex for girls in the teens. It has had a wide sale, because it is almost the only book that gives definite information in a form to be understood by immature girls. It is, however, in no sense scientific, and it is rather blunt, if not coarse, in its style, as *e. g.*: "Now, girls, science will teach us how we can form a naturally small waist, one really worth having," etc.

Shepherd, E. R. *True Manhood. A Manual for Young Men.* pp. 362. Chicago. A. B. Stockham & Co. 1891. Price, \$1.25.

This purports to be a popular work on the physiology and hygiene of sex for boys. It is really a combination of pseudo-science, sentiment, and fear-exciting experiences, which would be eagerly read by boys seeking erotic excitement. It has had a very wide sale.

Pancoast, S. *Boyhood's Perils and Manhood's Curse.* pp. 404. Philadelphia. John E. Potter & Co. 1873.

An excitable book, dwelling on the horrors of the pathology of sex.

A Lecture to Young Men on the Preservation of Health and Personal Purity of Life. By a Graduate. pp. 24. London. Henry Renshaw. 1892.

A sensible lecture to young men on sexual health.

Nichols, T. L. *The Beacon Light: Lessons in Physiology for the Young.* pp. 78. London. Nichols & Co.

A sensible and suggestive little book, giving children some direct information.

Cowan, John. *The Science of a New Life.* pp. 405. New York. J. S. Ogilvie & Co. 1869. Price, \$3.00.

Kellogg, J. H. *Plain Facts for Old and Young; Embracing the Natural History and Hygiene of Organic Life.* pp. 636. Burlington. I. F. Segner. 1888. Price, \$3.00.

These books represent a large literature intended to satisfy in adult life the accumulated curiosity of years. Many children, however, get their first definite sex-information from stolen readings in these books. They are generally sold by book agents, and their publishers, through sympathy with their readers, born of financial experience, place comparatively little emphasis on processes of reproduction, and dwell upon matters of sexual relation.

White Cross Series. For men only. Nos. 1 to 32. pp. about 30. London. Hatchards. 1886. Price, 1d.

American Reprints, with Some Variations. New York. E. P. Dutton & Co. Price, 3c.

Social Purity Series. Nos. 1 to 11. Chicago. Woman's Temperance Publication Association. Price, 3c.

These pamphlets represent an extensive propagandist literature, published by associations, and distributed at a nominal price over the world. They are, for the most part, reformatory rather than directly educative, and so are cast in extreme forms both as to fact and admonition. Their educational reactions are problematical; they could hardly interest sane, unspoiled young men and women; sexual pervers can find more attractive reading in our daily papers; and one almost questions after reading some hundreds of these pamphlets, whether they are not really created in response to an unconscious demand for philanthropic excitement on the part of the members of the societies.

Butler, Henry M. *Morality in Public Schools.* pp. 20. London. Harrison & Sons.

A religious exhortation to teachers.

Lance, Mrs. *The Teacher's Responsibility in Creating High Moral Standard in the Class.* pp. 15. London. Dyer Bros.

An exhortation.

Dodge, Grace H. *Girlhood and Purity.* A confidential letter to girls. pp. 8. New York. Box 2554.

A confidential talk, giving no information.

Bayly, Mrs. *An Old Mother's Letter to Young Women.* pp. 32. London. Shaw & Co.

A confidential talk; no information.

Hopkins, Ellice. *Grave Moral Questions Addressed to the Many Women of England.* pp. 68. London. Hatchards. 1884.

A characteristic general exhortation.

Scott, Lucy A. *Boys and Other Boys.* pp. 100. Chicago. Woman's Temperance Publication Association. 1888.

A religious and moral exhortation to boys.

Hime, Maurice Charles. *Morality: An Essay on Some Points Thereof.* (Addressed to young men.) pp. 204. London. J. & A. Churchill. 1884. Price, 1s. 6d.

A learned theological appeal to young men.

Everard, Rev. George. "*Your Innings.*" pp. 145. London. James Nisbet & Co. 1883.

Religious talks to boys, hinting here and there at sex problems.

Boyd, N. E. *About our Sexual Nature, and Giving the Young Ingenious Teaching on Delicate Subjects.* pp. 23. San Francisco. 1894.

A lecture to parents, urging the necessity of teaching children concerning matters of sex.

Blackwell, Dr. Elizabeth. *Counsel to Parents on the Moral Education of their Children, in Relation to Sex.* pp. 126. London. Hatchards. 1884.

An appeal to parents, urging them to look closely after the moral instruction of their children.

Duffey, Mrs. E. B. *The Relations of the Sexes.* pp. 320. New York. M. L. Holbrook & Co. 1889.

A series of chapters to young men and women, denouncing bad practices, and urging morality.

Girls: Their Work and Influence. pp. 68. London. Skeffington & Son. 1894.

Sentimental talks to girls, with hints.

The author will be grateful for further titles on this subject.

Address, EARL BARNES,
Stanford University, California.

THE DEVELOPMENT OF PERSONALITY IN CHILDREN.

EDWARD HOWARD GRIGGS.

Were one to attempt to sum up in a few words the "new idea in education," he would find the task extremely difficult; for the new inspiration is not a clearly formulated conception, but rather a subtle change in spirit and attitude. It is, indeed, a new and living reverence for persons. The conception of education as a preparation for a few formal occupations or activities is replaced by a view of it as a means of bringing out the potential power of the individual, and so of developing in him that active life which makes possible a continuous positive adjustment to the constantly varying conditions of the human world. This adjustment can never be accomplished by formal rules, neither in the world of personal relations nor in that of vocational activities. Unless there is organic power in the individual to carry on the continuous artistic adjustment, all intellectual maxims are puerile and ineffectual. Hence, the wide and full development of personality is the central aim in the new education.

This reverence for persons is found in all great teachers, but it is born anew in our time. The change in our view of education is only part of a general change in attitude toward life. We are learning to recognize afresh the new and untried character of all human problems, to see that the higher human life must always be in a condition of "unstable equilibrium." Only with constant growth is there life.

The spiritual world is a world of persons; there is nothing else in it except persons and their activities. As in biology, the fundamental fact is the "acting and re-acting self," so in all sciences dealing with the higher human world, the fundamental and universal fact is personality. All the power of thought, emotion, and will exists only in and through conscious personality.

The first fact regarding this higher human world is that one individual is very like every other. Life is made out of simple and

common stuff. We all begin at the beginning of the path of life and travel over the same road. All the novels and dramas in the history of literature turn on a few emotions, such as love, happy or disappointed, and the desire to realize oneself in action. The story of life is repeated for all of us. We come into the world, are children, youths, men and women, take on a half-dozen human relations, find or fail to find our place and activity, and pass down the declining slope of life, and out again into the dark. This story is lived with infinite variation, but still it is a common story, and much the same for all.

The key to this human world for any individual is his own personality. The only door to thought is thinking. The only way to the appreciation of emotion is through feeling. We can understand volitional activities only if we possess and exercise will. It is only possible to understand that to which we are related. Thus a world of space of two or four dimensions might exist; indeed, we can construct a science of mathematics for such a world. But we cannot *imagine* life in those conditions. If such a world exists, it is not a world for us; for we are constructed on the plan of space of three dimensions. The ability of a human being to grasp the law which holds the uttermost star in its place, is dependent upon the fact that it is the same law which makes it possible for him to lift his hand. Similarly our ability to understand anything in the spiritual world is due to the fact that all its laws exist in us. The meaning of all the spiritual universe is gathered up in each human soul.

This is well illustrated by the fact that one man is more than a multitude of men. Thus we read that many thousand men fell in a certain battle. We read the statement, and it makes little impression upon us. But if we enter into the grief of one wife or mother, for the husband or son who never came back, we understand. The meaning of the whole is evident, when we appreciate the significance of the unit part. It is such sympathetic appreciation that makes possible an understanding of history and of the world around us. Any fact of history is understood only when it is related to one's own personality. That which is most distinctively personal is most universally human. The poet who looks in his heart to write, and expresses what is most intimate in his own soul, appeals to all mankind. Each man finds in the art-expression something related to his own

experience. And as the artist must "look in his heart" to write, so the student must look in his heart to read. The key to the art work is the same intimate personal life out of which it was born.

To say, however, that one personality is in fundamental ways like every other, is to state but half the truth. The complementary truth is that each personality is in certain ways different from every other that ever was or ever will be. This is a law which holds of all the organic world. No two leaves are ever exactly alike; no two organisms are in all ways identical.

This element of individual variation increases with the upward progress of life, and finds its greatest expression in the higher human world. No two individuals have exactly the same inheritance, environment, education, experience. Each is, at it were, a new equation of old forces.

It is this that makes life eternally fresh and new. Though all the dramas of history turn upon a few emotions; yet this in no wise lessens the interest of the last, if it be true to life. Our own love is none the less a new miracle, that love has been in the world so long. No bitter experience is lightened because it is common. "Common is the commonplace, and vacant chaff well meant for grain," in those who would bring comfort in the fact of the universality of the experience. Every concrete problem we must meet is a little different from any other the world has seen. No situation is ever exactly repeated; and however simple and universal may be the stuff out of which life is made, every particular expression of it is new and untried.

Thus there are two balancing truths about the human personality. It is easy to see either, but hard to keep both constantly in mind. Yet a half-truth is more dangerous than utter falsehood, because the latter is soon discovered, while the half-truth may lead us far astray.

These two truths mean that in anything concerning the human personality we have both a *science* and an *art*; a science, because one personality is so like all others, and hence the fundamental laws of life apply to all; an art, because one is, in some ways, different from any other, and hence the concrete problems can never be solved by theory alone.

The *science* can be taught as far as it is known, but the *art* can be learned only in practice. Thus we can have a science of æsthetics,

a science of perspective. The laws of form and color can be taught as far as they are known. But this does not make one an artist. To succeed in painting one must attain the skill to express with his hand the dream of his heart, or the beauty the world reveals to him; and this involves psychological and physiological adjustments and habits which can be acquired only in practice. Indeed some individuals lack the natural ability ever to attain in a high degree a particular art. In all cases the most that a teacher can do is to aid the effort of the individual student by helpful suggestion and criticism.

In a similar way in life we may have a science of ethics. There are certain great laws which hold for all life everywhere. We can state as a fact of science that if a man or a nation of men attempts to live by habitual lying, the result is the same in the intellectual and spiritual life as it would be in the physical if arsenic were taken for bread. In so far as these laws of life have been worked out in human experience, they can be taught to others; but this alone does not make it possible to live well. Over and above the science of ethics must be the art of conduct, and this art, like every other, can be learned only in practice. Every love and every friendship is a problem of the constant artistic adjustment of two personalities to each other; and right action in every sphere demands a similar artistic adjustment to the constantly changing conditions of life.

In education, as well, we have both a science and an art. There are certain fundamental laws governing the nature and development of children; and as our studies go on, we shall understand these better and better. The educational principles derived from these, in so far as they are known, can be taught to others. But this alone can not make successful teaching. Above the science of education is the art of teaching, and this involves the constant artistic adjustment of the personality of the teacher to that of each pupil.

To forget either of the two complementary truths is disastrous to life. If in education we forget that one personality is in fundamental ways like all others, that certain great truths hold for all, that our work must rest upon science, the result is an exaggerated individualism, which leads to the disintegration of school work. This is, however, an error that tends to correct itself. No common results are attained for all the children; the failure is so obvious that the teacher loses his place.

Unfortunately, the other error does not tend so quickly to correct itself, although it is equally destructive to the vitality of our teaching. If we forget that one personality is different from every other, and that hence every science dealing with human life must culminate in an art, we incline to reduce our educational work to a dead, hard system. This hampers and thwarts the development of personality in children, and fails to bring out in them that organic power which makes possible an active adjustment to the dynamic world in which they are to live. Thus this error is every way destructive of the best interests of life. It is less obvious than its opposite, because certain results are attained for all the children. The hard grind through which they pass does involve some discipline, and makes it possible for them to do certain definite things. Hence the extent of the failure is not evident.

This explains why this error has been so common in the history of education. It has been so widespread and so extreme that there have been times when it was better for a boy to grow up on the farm or in the shop, meeting the changing conditions of the actual world, than to pass through the dead system of the school. That is to say, merely formal education may be at times worse than useless.

If we are to succeed in our educational work, both errors must be avoided. A natural and full development of personality is essential to give the ability to meet actual life; at the same time, our work must not be narrowly individualistic, but must rest upon the broad foundations of science, and attain certain common results for all children. Thus a reverence for personality, and a consecrated effort to develop in each child the best manhood or womanhood potentially there, must be the inspiration of all our teaching.

This applies to every aspect of school work, nowhere more emphatically than to school government and discipline. Every act of school government has an effect on the character of the pupil. Hence the question is always a moral one; and the aim of all school discipline and government should be the fullest development of personality on the part of the children, in harmony with the fundamental laws of life.

The importance of this problem is evident when we realize how large a part of moral education comes through environment. Didactic ethical instruction is of relatively small import in moral education, filling, at best, but a portion of the whole need. The

effect of environment is indefinitely more important; both the environment of organized law and that of other persons.

The problem is dynamic and not static. The different phases of the development of a child's personality require different methods and stimuli for the best results in moral education. Younger children are less rational than older ones. They obey because they love us, or lacking that, because they respect us, or if that too be wanting, sadly enough they obey, if at all, because they fear us. In other words, they respond only to emotional stimuli. In their earliest years, the most that we can hope to do is to develop a habit of right obedience, by applying true moral stimuli, and requiring regular response to them. This basis of habit is what we have to work with when the development of reason proceeds. Yet in itself it is but a step toward moral education, if the aim be the development of personality in positive harmony with the laws of the universe.

There was formerly a theory of moral education which held that the first thing to do was to break a child's will, and the next to suppress his reason. Such a course of education might train the slavish subjects of a blind autocracy, but is utterly incapable of developing intelligent citizens of a free republic, or of preparing children to live in the great world. The training in moral habit mentioned above is a cultivation rather than a breaking of the will; and similarly, the development of a child's reason should be assisted, instead of being hindered, by every means in our power.

When children get to be five or six years old, they begin to question why they should obey. This is, of course, a critical time in their development; and we can do much to help or hinder their best life. We can regard such questions as a dangerous sign of insubordination, and by so doing check the development of the child's reason, and keep his obedience as blind and irrational as possible. Or we can encourage such questions and seek to give intelligent answers to them; and so assist the child to an obedience that is free and rational, and not merely compelled and non-intelligent. In the intellectual world we have learned to welcome a child's questions as to the "why" of things as the greatest help in leading his growing intelligence. Shall we not recognize that the same is true in the moral world? If our object is the development of the child's personality, we desire the mere blind obedience to become more and more rational and free. It is this transition which gives an

intelligent citizenship, and a desire and ability to live in conscious and voluntary harmony with the laws of life.

Thus the older the child, the more personal does the problem of government become. Each must see and assent to the reason in every act of government and discipline, if the effect is to be moral. The greatest of all possible errors is to attempt to make older pupils exactly like younger ones. This is to retard the development of personality, and make fear take the place of reason. Such a course renders it impossible for one to meet intelligently and freely the problems of the actual human world. Hence so-called moral education is often worse than useless, being destructive to the very principles it should strive to foster. Many a teacher has acquired a reputation as a "good disciplinarian" only through his ability to frighten timid children into a blind obedience to irrational and arbitrary rules. Such a reputation is attained at the expense of the best moral development of the children.

Hence the school organization should be as rational as possible. The school is a part of the organic environment of a child's life, corresponding to the state in relation to adults. The world of the schoolroom is a little world; but it is as important to the child as the state is to older human beings. Like the state, the school is an organization with a certain purpose, and its laws and principles are determined by that purpose.

It is obvious that the type of organization in the state leaves its impress on all the citizens of a state. The kind of citizens produced by a tyranny is very different from that developed by a constitutional monarchy or a free republic.

All the different types of organization which are found in the state can exist in the school, and the effect upon the character of the governed is parallel. Hence in all study of the question of school organization we should view it as a moral question, the end to be sought being the best moral development of children; and we should never regard it merely as a question of the easiest method of attaining comfortable order in the school.

The effect of an irrational tyranny is to make two classes of citizens: slaves and nihilists. The weaker people become blindly submissive, and lose all will of their own. The stronger react bitterly upon the power that dominates them, and become destroyers. Similar results follow from the same type of organization and disci-

pline in the school. When a school is governed by mere brute force, the weaker children are frightened into an abject submission, which progressively annihilates will and reason in them. Children so trained are utterly unfitted to be citizens of a free republic. They tend to become the men and women who follow the cry in religion and politics. They are incapable of an independent opinion and of voluntary obedience to personal conviction. The stronger children, on the contrary—those who have the best possibilities of manhood and womanhood in them, tend to become rebels. They may obey while the superior force dominates them, but their obedience is irrational, and as soon as the force is removed they incline to react against it, and go to the opposite extreme. This is always a pathetic spectacle, for it is such a waste of life; so destructive to the individual, and so injurious to society. As Plato said long ago: "The most gifted minds, when they are ill-educated, become pre-eminently bad." Those who have greatest power and possibility can do most harm if their force is misdirected. And often the individual only learns that life means a free and rational harmony with the order of the universe, and that sin is death, through the destruction of his own best possibilities.

If education is to have any value at all, it should seek to avoid this waste of life. Requiring a kind of obedience which makes the work of the school easier for the teacher, at the expense of the best development of personality on the part of the children, is immoral to the last degree.

A rational organization is one involving as few rules as possible, and presenting only such principles as are essential to the attainment of the ends for which the organization exists. Rational obedience is obedience that is given because the reason appreciates the need of the laws which lead to worthy ends.

It is said, however, that children are incapable of understanding the aims and principles involved in school organization. The great difficulty lies in the fact that our school organization is so seldom truly rational. Children five and six years of age are quite as capable of understanding the aims and principles of the school as the average American citizen is able to understand those of the State; and if we dare to try the experiment of democracy in the one case, we should surely seek to apply it in the other. Children easily understand that they come to school to learn

something, and to let their neighbors learn, and that promptness, reasonable order, quiet, and attention are essential to this end. These principles are simple, but they are as universal and necessary in all human life as they are simple. Right conduct which results from a recognition of these, and is in free harmony with them, is of incalculable value in moral development; preparing children to live in a world where life is only possible by free obedience to the order of law. On the other hand, a slavish obedience to irrational rules governing the details of conduct involves all the dangers mentioned above.

Thus everywhere in the school an unnecessary rule is a distinct hindrance to moral development. Always, the fewer rules the better; and if obedience to definite rules can be replaced by a frank recognition of essential principles, and a voluntary choice on the part of the individual of the action in harmony with these, a high plane has been reached in the moral development of personality.

The whole problem of moral education involves the recognition of three truths: (1) That this world is a world of law and order, and not a world of chance and accident; (2) That life, and all good ends of life,—happiness, culture, wisdom, love, helpfulness,—can be obtained only by free obedience to the order of law which is the universe; (3) That we owe such obedience.

A rational organization of the school, and a government of it which seeks the moral development of the personality of children can attain these ends of moral education—not through a mere didactic teaching, which must always be ineffectual, but by rendering them organic in the developed personality of each child.

But it is obviously not alone through the organization and discipline of the school that we can further the development of the personality of children; the same principles have an application to every part of the school work, from the question how many pupils one teacher should attempt to handle, to the problem of teaching any particular subject. Among these applications that to the teaching of science to children may be taken as an illustration of their general importance.

The developed and differentiated “sciences” are the work of adult and reflective human intelligence. Nature knows nothing of the sciences. Nature is a great whole in which every part is related to every other. The same flower may be an object

of study in a dozen sciences, as botany, general biology, histology, morphology, chemistry. Indeed, as one fact is related to every other, if we knew, as Tennyson has suggested, the little "flower in the crannied wall," "root and all, and all in all," we "should know what God and man is."

If, then, we cease to look at the human mind as statical, and recognize the different phases in the development of the personality of children, we shall not seek to teach young children the formal differentiated sciences which are the work of adult intelligence; but, on the contrary, we shall strive to awaken them to a recognition of the great living nature-world about them. We shall not try carefully to separate the facts of botany from those of physics and chemistry, but shall be glad to lose the separation of the sciences for the sake of a perception of the unity and relation of the facts. The sympathetic appreciation of life in its organic relations should precede the destructive analysis which seeks to study analytically the differentiated part. I should as soon think of teaching young children vivisection as to teach them to pull a flower to pieces to count its petals before they have learned to appreciate it as a living organism with a history, passing from seed to root, stalk, leaves, flower, and then to seed again. When reason develops, reflective and analytic study can be gradually introduced; but it should be only then.

Even more important is the application of the principles to the teaching of literature and history. These subjects, and those most closely allied to them, form the means of relating the individual to the life of the race. In order to bring the individual into his human inheritance, facts are but means to an end. The most difficult thing in teaching history is to lead students to attain a realizing sense of the past. To this end the personality of the individual must be the key. The personality of the individual child must be brought into sympathetic relation with the men and women behind historic deeds and artistic expressions of life. In teaching the history of the Revolution, if children can learn to share the thoughts of Washington—or better, if they can feel as a common soldier felt during that terrible winter at Valley Forge,—they will realize that the deeds of which they read were, after all, done by human beings like ourselves. I remember being once in an old New England graveyard, and seeing upon a stone these words: "Got beyond the reach of persecution." On inquiring of the older people in the village,

I learned that the grave was that of a Tory who had lived through the Revolution, and for years afterwards. Then the whole story became alive to me. The man was loyal to a lost cause. He would not turn against King George and his mother country. I understood all that other side of the Revolution, of which our history books tell us little. This man did not believe in our cause; but he was true to his own conviction, and endured the persecution that such a course involved.

It is, then, through personal contact with direct expressions of the life of the past that it becomes living for us. Only when we attain such a realizing sense of the past, can we appreciate anything of the larger movements of history. Lowell speaks in this connection of the value of any relic which connects us with a great human personality. It is then that

"The statue shrined and still
In that gray minster-front we call the Past,
Feels in its frozen veins our pulses thrill,
Breathes living air and mocks at Death's deceit.
It warms, it stirs, comes down to us at last,
Its features human with familiar light,
A man, beyond the historian's art to kill,
Or sculptor's to efface with patient chisel-blight."

Literature is even more personal than history in its embodiment of human life, as it is an expression of the ideals, and not merely of the external facts, of the past. As in history, so in literature, the true end is attained only when the child's personality is related to the human life that is expressed. The verse-form, the imagery, the diction used in a literary production, are significant only when we appreciate their relation to the life behind them. Any dramatic production is alive only when we feel the persons,—understand their hopes and fears and struggles. The meaning of all details of form is evident only in relation to these qualities of personal character.

Such a positive relation of the personality of the student to the expression of human life in history and literature is of incalculable value in developing the power which makes active and positive life in the human world possible. When the individual thus enters into his human inheritance, he is able to understand the world about him. His eyes are unsealed to the drama of daily life, with its infinite

comedy, tragedy, and romance; he learns to see the divinity of common things.

Thus in every sphere of the school work it is possible to do much to develop along natural lines the personality of children. To possess a strong, fully-developed personality, rational, and able to live in voluntary harmony with the laws of life, is to be truly educated. In moral education this is causing moral truth to become organic in the individual; and is not merely imparting didactic ethical instruction. In intellectual education this is a development of active power, and no mere acquisition of a mass of information. Such education makes possible that constant artistic adjustment to the conditions of life and progress, which is *living* in the truest sense.

Studies in Education

IX.



STUDIES IN EDUCATION

EDITED BY

EARL BARNES,

Professor of Education in Leland Stanford Junior University.

MARCH, 1897.

	PAGE.
CHILDREN'S SENSE OF MONEY—Anna Köhler	323
CLASS PUNISHMENT—Caroline Frear	332
PERSEUS AND MEDUSA (Illustrated)—David Starr Jordan	338
CHILDREN'S ATTITUDE TOWARD PUNISHMENT FOR WEAK TIME SENSE—David S. Snedden	344
CHILDREN'S MOTIVES—Alma Patterson	352
THE CHILD AS A SOCIAL FACTOR—Earl Barnes	355

VOL. I.
No. 9.

STANFORD UNIVERSITY.
1897.

\$1 a Year.
15 c. a Copy.

STUDIES IN EDUCATION.

These studies begin with July, 1896. They will be continued as a monthly publication for ten numbers. The last number will contain an index, and a full table of contents. The cost for the year is one dollar, or fifteen cents a number. Address all inquiries or subscriptions to

EARL BARNES,
Stanford University,
California.

Entered at the Post Office in Stanford University as Second-class Mail Matter.

CHILDREN'S SENSE OF MONEY.

ANNA KÖHLER.

The aim of this study is to determine children's attitude toward money, and their ability to understand its meaning at different stages of their development. How far can children of different ages measure the relative values of two things through translating them both into some third measure of value? How far can they give up something of immediate concrete personal value for the sake of money or credit, which they can hope afterward to turn back into something desired for its own sake? How far are they interested in storing up their possessions and acquisitions in some abstract form—money or a bank—as a reserve fund for the future?

Or, to put it differently, we want to know what the feeling of children is toward money; and at what time, in what manner, and how far we can wisely assist children to relate themselves to their world through seeing the relative values of things in terms of money.

With a view to throwing some light on these questions, the following test was sent out to different California schools from Stanford University:—

As a composition exercise in your school, have your pupils write a composition in which the following questions are answered:—

1. Have you a regular allowance? If not, would you like to have one?
2. If you could have an allowance of fifty cents a week to do with just as you liked, what would you do with it?
3. Do you ever earn any money? How?

Four thousand papers were collated on this test—two thousand from boys, and the same number from girls. Some of the children answered only a part of the questions, and as each paper was recorded under a heading, "Number of Papers," the numbers under any heading rarely add up an even hundred.

The answers to the first question, "Have you a regular allowance? If not, would you like to have one?" were collated under the headings, "Have a regular allowance," "Have not a regular

allowance," "Would like one," and "Would not like one." There were some difficulties in collating these answers, because the children often confused "regular allowance" with "regular wages," giving answers like the following: "Yes, I do get a regular allowance for the work I do;" or, "I always get regular wages for my work." Where the meaning was not clear, the answer was rejected.

Seventy-two per cent. of the boys who wrote, and the same proportion of the girls, receive no regular allowance. That they do not receive a regular allowance is clearly not due to their desires, for, under the next heading, "Would you like to have one?" we find sixty-eight per cent. of the boys and sixty-six per cent. of the girls would like an allowance. Ten per cent. of the boys and seven per cent. of the girls would not like an allowance. The others do not answer the question.

There is a slightly increasing number of children, from the ages of seven to sixteen in both sexes, who say they would not like a regular allowance. Among the younger children we have reasons like the following: "I would not like a regular allowance, for whenever I want any money I ask for it and get it;" or, "If I had a regular allowance, I could not have so much money." As the children get older, their answers are different—"My parents are too poor to give me a stated sum every week, and so I should not like one;" or, "If I want money, I am big enough to work for it."

The answers to this question certainly justify us in saying, (1) that California children, as a general thing, do not receive regular allowances; (2) that when they do, no preference is shown girls over boys; (3) that children would generally like a fixed allowance.

The answers to the second question, "If you could have an allowance of fifty cents a week, to do with just as you liked, what would you do with it?" were collated under the headings, "Save it" and "Spend it," with sub-headings under each.

Of the four thousand papers examined, fifty-seven per cent. of the boys and fifty-four per cent. of the girls would save their money. Thirty per cent. of the boys and twenty-nine per cent. of the girls would spend it. To put it in more general terms, fifty-four per cent. of both sexes would save, and thirty per cent. would spend the fifty cents. These figures would indicate no perceptible difference between the boys and girls, and they would tend to show that chil-

dren's saving propensity exceeds their desire to spend, or else they wish to be thought saving.

An attempt was made to collate papers under the heading, "Save it to accumulate," but the answers were so indefinite, and the judgment of the collator was called in so often to decide, that the rubric was thrown into the more general one of "Save it."

Among the boys from the ages of seven to eleven, there are thirty-two per cent. who would save the fifty cents, as contrasted with twenty-seven per cent. from the ages of twelve to sixteen. Taking the girls in the same groups, there are thirty per cent. from the first and twenty-five from the second, showing the same tendency as the boys. This indicates a desire to save among the children of the younger years. Is this not accounted for, however, by the fact that fifty cents is more to the younger children than to the older ones? Their experience being less wide, their needs are not so great.

To find out what children would save the fifty cents for, sub-headings were made under the general rubric, "Save it." We find that the girls are, from the first, most interested in saving for dress. This includes ribbons, laces, shoes, hats, suits, neckties, etc. They begin to save for dress at the age of seven, while the boys begin at the age of nine.

Taking the ages in groups, we find that six per cent. of the girls and one per cent. of the boys save for dress from the ages of seven to eleven. From twelve to sixteen, the girls' per cent. falls a trifle, while the boys raise their per cent. to five. This falling on the part of the girls' per cent., or rising on the part of the boys' per cent., may be due again to the relative size of the fifty cents. Saving for dress to the boys means shoes, hats, or a suit, no mention being made of gloves, neckties, or handkerchiefs. The impression given by the papers is that boys would save to buy what is necessary, and that girls indulge in accessories like gloves, handkerchiefs, belts, ribbons, etc.

"Saving for Christmas presents" was another heading; and here, too, the difference between boys and girls is marked. Three per cent. of the girls would save to buy presents for others, while only one per cent. of the boys would do so.

Under the heading of "Useful things," we have three per cent. of the boys and no girls who would save for "wood," "coal,"

"food," or "useful things." "To save for pleasure" included "a bicycle," "a pony," "a horse," "fishing-pole," "a visit," "a party"; and here we find returns from twice as many boys as girls.

The thirty per cent. of boys and twenty-nine per cent. of girls who would spend the fifty cents were collated under sub-headings similar to those used for the children who would save it. Such answers as "I would spend it for food," or "I would spend it for what I needed," developed a heading, "Necessary things." The last phrase occurred so often, however, that it makes the result comparatively worthless, as a child's conception of what he needs would probably vary from that of an adult.

Sixty-six per cent. of the boys from seven to eleven years old would spend the fifty cents for necessary things, and only twenty-two per cent. from twelve to sixteen. The girls reverse this order, sixteen per cent. occurring from seven to eleven, and thirty-nine per cent. from twelve to sixteen.

"Spend for pleasure" included "renting wheels," "going to see tame bears," "going to swimming-tanks," etc. Under this heading we have five per cent. of the boys under eleven, and three per cent. from twelve to sixteen. The same tendency prevails among the girls, three per cent. of the earlier years falling under this rubric, while we get but one-half of one per cent. from the later years. This decrease in the later years of the girls may be due to their environment, for at those ages they are not allowed to go about as freely as the boys are.

Girls are a little in advance of the boys in their fondness for candy. Five per cent. of the girls would spend for candy, and four per cent. of the boys.

It is interesting to note that six per cent. of both girls and boys would spend their money for books. This tendency begins at the age of eleven, and gradually increases.

The returns from the heading "Spend for others" bear out the conclusion drawn earlier that girls show more altruism than boys; for in this group we find but one boy against forty-five girls. This difference between boys and girls may well be due in large part to the training given each from their earliest years. The daily life of girls, spent mostly in the home circle, tends to make thought for others habitual, while boys, allowed freedom both in play and work, naturally develop the egoistic side of their natures.

This study on the use of the fifty cents would seem to justify us in saying:—

1. Children declare themselves in favor of saving, rather than spending, money. How much of this is the result of training, and how much of it is natural, is hard to determine from this study. The fact that the question stated that they could do what they liked with the fifty cents would tend to offset some of the training; and, again, the fact that the fifty cents is theirs in fancy, and not in reality, makes it easier for them to respond to what they think is expected of them.

2. There is no considerable difference in the attitude of the sexes toward saving or spending money.

3. The practical sense seems to be inherent in the boy-nature. There comes a time, between the ages of twelve and sixteen, when it becomes decidedly less. With girls, this practical sense seems to be weak below the age of twelve, but develops strongly from twelve to sixteen, the period when boys show it least.

4. Beginning with the age of twelve, both boys and girls show in their pleasures the influence of their respective training. The girl's subjective life develops rapidly from that age, her pleasures become more personal and less common, while the boy lives in a bigger world, and his objective life widens as he grows. His pleasures are those of other boys.

5. Girls care more for dress than boys do. The desire of boys to appear well-dressed increases decidedly from the ages of twelve to sixteen. This ideal of dress with boys is the sex-type, while with the girls it is more a matter of individual taste.

6. Girls are more altruistic than boys. This is shown by the results from the two rubrics, "Save for Christmas presents" and "Save for pleasure."

Perhaps the answers to the third question, "Do you ever earn any money? How?" will help to explain why so few regular allowances are given to California children, for the results of these two headings correspond almost exactly with the answers given under the former headings, "Regular allowance" and "No regular allowance." The figures stand:—

Boys—74 per cent. who earn, and 72 per cent. who get no allowance.

10 per cent. who do not earn, and 10 per cent. who get allowance.

Girls—69 per cent. who earn, and 72 per cent. who get no allowance.

24 per cent. who do not earn, and 7 per cent. who get allowance.

A glance at these per cents. shows us that there are fifteen per cent. more boys than girls who have earned money. This, again, may be caused by the difference in tasks imposed on the boy and girl. She must learn to keep house, and there her work is all gratis. He is at liberty to work away from home, and if he helps about the house he is often paid for what he does outside his tasks.

Only two papers showed a disposition to belittle work, and both of these were from girls,—one thirteen and one fifteen years old. They say: "My father is not so poor that I have to earn money," and "We are not poor, and I do not need to earn money."

The most popular way of earning money is running errands, ten per cent. of the boys and thirteen per cent. of the girls making it in this way. Other ways of making money are:—

Working in fruit	Boys, 9 per cent.	Girls, 12 per cent.
Being good	" 1 "	" 3 "
Housework	" 3 "	" 14 "
Caring for things . . .	" $\frac{1}{3}$ "	" 3 "
Selling things	" 5 "	" 2 "
Miscellaneous	" 40 "	" 12 "

From this we see that girls earn more money than boys in running errands, working in fruit, being good, housework, and caring for things. As a result of our study on this question, we can say: The majority of California children earn money. Boys earn more than girls do, and girls' occupations are those which are suited to their more passive life, and which call into play a feeling of responsibility, while the boys' occupations are active and varied, like their lives.

Is this a cause or an effect of the fact that girls develop more rapidly than boys do?

Three other questions were given to a smaller number of children, and one thousand papers written by each sex were collected and worked up.

The first of these questions was, "Did you ever find any money, and if so, what did you do with it?" In this test we are confronted at the outset with difficulties which considerably weaken

the validity of our conclusions. For instance, a fourteen-year-old boy answers, "I found five cents when I was little, and I spent it for candy." This is entered in the fourteen-year-old column, under "Spent for candy," when it was spent at some other age. The majority of those who found money forgot what they did with it.

More than half of the children have found money, and the boys have found it more often than the girls have. This we should expect, as the boys live lives more in public than girls do.

Under "What did you do with it?" "Tried to find the owner, but could n't," was very frequent. The fact that so many found money and did not remember what they did with it, shows that the mere possession of money is not very impressive.

The money found was pretty equally divided between "spending for pleasure" and "saving it." Twenty-four per cent. of the boys and seventeen per cent. of the girls either saved it or gave it to parents. Twenty-seven per cent. of the boys and sixteen per cent. of the girls spent it for pleasure.

The second of these later questions was: "About how much is sugar worth a pound? How much are eggs worth a dozen? How much can a man earn a day shoveling coal?"

The price of sugar per pound puzzled alike both boys and girls. Their answers were grouped under the general headings, "5 cents to 15 cents," "15 cents to 25 cents," "25 cents and above." Taking the children in two groups,—those from seven to eleven years old, and those from twelve to sixteen,—we find that, in the first group thirty-five per cent. of the boys and twenty-six per cent. of the girls give "5 cents to 15 cents," and in the older group sixty-eight per cent. of the boys and fifty per cent. of the girls give the same answer. Those who give "15 cents to 25 cents" are, younger children—boys fifty-two per cent., girls fifty-one per cent.; older group—boys nineteen per cent., girls thirty-two per cent. Thirteen per cent. of all the boys and twelve per cent. of all the girls do not know how much sugar costs. The great variation in prices given, which range all the way from five cents to one dollar, is probably due to two causes. First, the general way of buying is in quantities costing twenty-five cents, fifty cents, and one dollar; and, secondly, the children have a false conception of the term "pound."

The prices given for eggs, while covering a fairly wide range,—

from ten cents to fifty cents,—may be considered correct, for the price of eggs varies so greatly from time to time that no fixed standard can be set up.

Children seem to have a very correct idea of how much a man can earn in a day, for ninety per cent. of the answers are between one and two dollars.

From the above we may conclude that California children can translate things with which they are familiar into terms of money, with a fair degree of accuracy when the value is small.

The third of these later questions was: "If you had a thousand dollars of your own, what would you do with it?"

Forty per cent. of the boys and twenty-five per cent. of the girls would put it in the bank. It is interesting to note that the girls would "have papa put it in the bank for me," while the boys say, "I would put it in the bank." Fourteen per cent. of the boys and eight per cent. of the girls would buy a house. Eight per cent. of each sex would spend part or all on the family, either for things to eat and wear or "to pay off debts." Three per cent. of each sex would give part, or all, for charity.

That the real value of a thousand dollars is an unknown quantity to many of the children, is shown by the frequent occurrence of the statement that the whole amount would be expended upon "a wheel," "a horse," "a piano," or "a fine present for my teacher."

From the per cents. under "Put in bank" and "Buy a house," we conclude that the boys have a better sense of business and a truer idea of money in its abstract form.

The following general conclusions would seem to be justified by this study:—

1. Most children would like a regular allowance of pocket-money, though few California children have it.
2. Most of our California children earn money, mainly in connection with some sort of domestic or house work.
3. Our children show a tendency to save up small sums of money rather than to spend them,—at least in their statements.
4. Children are capable of translating values of common objects into terms of money where the values are small, but have little comprehension of a thousand dollars.
5. Boys and girls are treated about alike as to allowances in California, and boys earn more money than girls do; their attitude

toward spending and saving is about the same, but they spend differently, girls being more generous to others and more interested in personal adornment than boys are.

Very few pedagogic questions are answered by this study, though many are raised. Pestalozzi works out the redemption of his village in *Leinhard und Gertrud* through the development of thrift. Everywhere to-day the question of school savings-banks is being agitated, and, at the same time, our American civilization is most often criticised for its mercenary tone. How far shall we consciously develop children's sense of money? It is a question in sociology and ethics quite as much as in pedagogy, and this study does little more than to throw some side lights on the following questions:—

Ought children to have an allowance?

Ought children to be paid for domestic services?

Should children save money for the sake of accumulating?

Are school savings-banks desirable?

Should children save to get some important thing, as a bicycle?

Should work in arithmetic and other branches be adjusted so as to develop children's sense of money values?

Should children be early given a sense of the economic value of their clothes, books, and playthings?

Should children be encouraged to give money to organizations removed from their own immediate life, such as missionary societies?

CLASS PUNISHMENT.

CAROLINE FREAR.

In the schoolroom, a child finds himself a citizen of a miniature society, in which he must act not only as an individual, but as a social factor, bearing relations to other social factors and to the social whole. How far is he capable of appreciating these responsibilities?

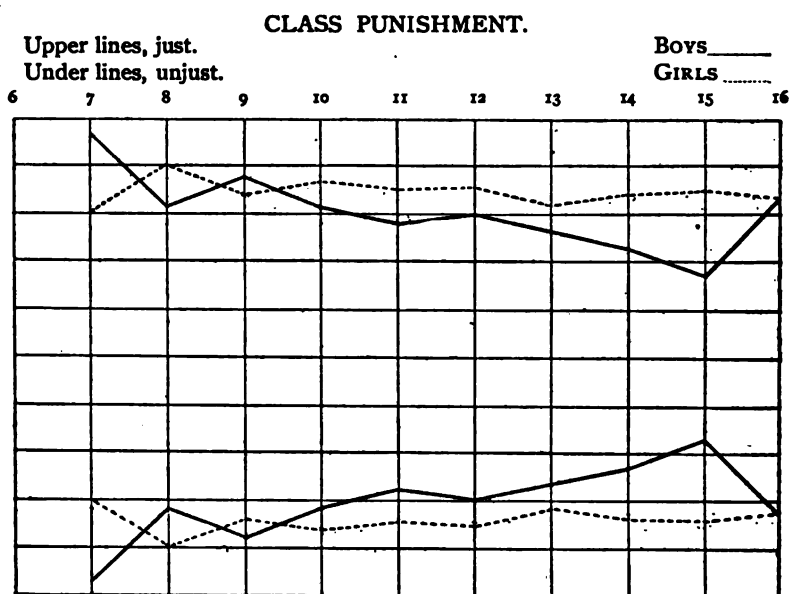
The test given below was designed to throw some light on the attitude children have toward discipline, in their relation as social factors in the class, rather than as mere individuals. Specifically, the test turns on the reaction of children against class punishment, and the practical pedagogical question arises, How far can class punishment be successfully used?

"One day the teacher left the room, and while she was gone several children in the room began to make a noise. The teacher heard the noise as she was coming back, but did not know which children were out of order, and none of the class would tell her. So she kept the whole class after school. Was the punishment just or unjust, and why?"

The test was given, without comment, as a composition exercise, by teachers in Sonoma, Lake, Yuba, Shasta, Marin, Santa Clara, and other counties, and returns from 1914 children have been collated. Of these children, ranging in age from seven to sixteen years, 968 were boys and 946 were girls. Each age of each sex was collated separately, in order to bring out tendencies running through the different ages, and also the different attitudes, if any, of boys and girls. For purposes of presentation, I have grouped boys and girls of the same age together, and have further grouped ages as follows: Seven to nine years, ten to twelve years, thirteen to sixteen years, and have worked out averages by combining all the ages. The papers were collated under the headings "Just" and "Unjust," with sub-headings for the reasons why just or unjust.

Of the whole number of children, eighty-two per cent. consider the punishment just, seventeen per cent. consider it unjust, and one per cent. give qualified answers. The per cent. of those regarding the punishment as just decreases very slightly with years, as the

following chart shows; and the per cent. of those regarding it unjust increases very slightly, but through all ages the proportion of the former far exceeds that of the latter.



The following figures show the age tendency in groupings:—

	7 to 9 years.	10 to 12 years.	13 to 16 years.
Just	88 per cent.	83 per cent.	79 per cent.
Unjust . . .	12 " "	17 " "	21 " "

These facts may indicate tendencies, decreasing somewhat with age, on the part of children to accept as just their accustomed experience; they may show the influence of suggestion from the test itself, in which the teacher did actually keep the whole class in. A consideration of the reasons given, however, may convince us that we have the actual attitude of these children toward such a punishment. The reasons for justice and injustice I have given in the simple forms suggested by the papers. The percents. for the reasons under "Just" are made out on the number of "Just" papers, not on the whole number of papers, and the same is true for reasons under "Unjust."

Of the children who consider the punishment just, forty-seven

per cent. give as the reason, that the class would n't tell, or ought to tell, who the guilty few were. The statement "ought to tell" increases with years. This implies the guilt of the class itself in not telling. We find such statements as these: "They ought to have been honest, and told her which of them made the noise;" "They ought to have been ashamed not to tell;" "They ought to have told the truth." Of the others, five per cent. say the guilty should confess; sixteen per cent. say simply that the class was bad, or in disorder, or deserved the punishment, without discriminating the innocent and the guilty; ten per cent. call the punishment just, because the teacher did n't know who the guilty ones were; five per cent. regard the punishment of the whole class as a sure way of punishing the guilty; four per cent. look upon it as a measure to prevent repetition of the disorder; four per cent. say it was a means of finding out the guilty; eleven per cent. give no reason.

Or, to put it differently, forty-seven per cent. think of the innocent children involved, but hold them responsible. Five per cent. think only of the guilty ones, and say they ought to confess, nevertheless justifying the punishment; sixteen per cent. simply think of the general disorder, and so justify the punishment; and twenty-three per cent. consider the general expediency of the matter, and accept the punishment because it accomplished desired ends, or was the only way.

We notice that class punishment is not largely justified by the children, on the ground of the justice of the thing *per se*. There is very little justification of the punishment of the innocent with the guilty on reasonable grounds, such as those of expediency. The test did not strike a large proportion of the children as a question of punishing good with bad, but as a question of punishing a whole guilty class. It was not so much a question of "moving all the potatoes in a sack to get at the bad ones," as one boy tersely put it. What the test brings out most prominently is the attitude of children toward the detection of guilt. The class was held responsible for its own punishment by the forty-seven per cent. of the children, who justified the punishment on the ground that the class would n't tell, or ought to tell who the guilty were. Does this not show that children appreciate a difference between ordinary, despicable tale-telling and the honest giving of evidence legitimately called for, which can preserve the honor of the whole class and bring good to

the greatest number? There are very few instances where the children say that the innocent "did n't want to be tell-tales on the guilty." This may show that children easily realize that as social factors they must lay aside little personal feelings and do what is for the common good. As a boy of fourteen expressed it, "If you told, you might be called a sucker, but it would be better to do it and show that you were honest." And a girl of fifteen says, "The children had evidently the wrong idea of what was right, and the teacher should have brought them to the point, where they would have been able to see that they were doing wrong in sheltering the guilty."

It is interesting to notice that the sentiment that the class ought to co-operate with the teacher in the detection of guilt increases with age, from thirty-nine per cent. before ten years of age to fifty per cent. after ten years. Is it not important to develop this feeling of social responsibility and appreciation of common-weal in preparation for good citizenship in a community? Such a development seems to be along a line of little resistance.

The following table shows the relative appealing power which the reasons given for the justice of the punishment possess at different years. Decided age tendencies are noticeable.

Just.	7 to 9 years.	10 to 12 years.	13 to 16 years.
Class would n't, or ought to, tell	39 per cent.	50 per cent.	50 per cent.
Guilty should confess	2 "	4 "	7 "
Class was out of order	25 "	17 "	11 "
Teacher did n't know	12 "	10 "	10 "
Sure way of punishing guilty	1 "	4 "	8 "
Prevent repetition	2 "	4 "	7 "
To find out the guilty	1 "	3 "	7 "
No reason	23 "	12 "	4 "

We find a decreasing number of those who give no reason, and also of those who focus their attention on the offense and do not analyze the problem sufficiently to distinguish guilty and innocent. We find an increasing number who consider the expediency of the punishment.

Of the children who claim the punishment unjust, the majority regard the question in the light of punishing the innocent for the guilty. They express their reasons in various forms, as: "The good should not be punished for the bad;" "A great many should not suffer for a few;" "All were not guilty;" "Only the guilty

should be punished." The percentage increases from forty-nine per cent., through fifty-four per cent., to seventy-three per cent. of the number calling the punishment unjust.

This view of the matter, which does not bring in the complicating question of the guilt of the class in not telling, but deals only with the general principle, seems to imply an increasing democratic sense of the rights of the majority, and a demand for social protection, and at the same time an increasing sense of legitimate individual rights.

The fact of this increase leads us to believe that, if the question were not involved with that of the guilt of the class in not exposing the disorderly ones, the number of those considering the punishment unjust would have been far larger.

Of the others who regard the punishment as unjust, sixteen per cent. say the teacher didn't know, or ought to find out who the guilty ones were; a small per cent. give miscellaneous reasons; and a decreasing number give no reason, as was the case with those who called the punishment just.

To sum up the whole study, I call attention again to the following important movements from which conclusions may be drawn:—

- a. Decreasing sense of the justice of class punishment.
- b. Increasing sense of the injustice of class punishment.
- c. Increasing sense that good should not be punished for bad.
- d. Increasing sense of the guilt of the class in not telling.
- e. Decreasing inability to give reasons.
- f. Decreasing tendency to focus attention on the offense alone.
- g. Increasing appreciation of the use of punishment as an expedient; for example, as a means of preventing further trouble.

The following conclusions are based on the above movements:—

a. Children accept in early years arbitrary punishment enforced by authority. They submit to such punishment less readily as age increases.

b. Children have an increasing sense of their value as individuals, and increasingly demand the protection of their individual rights.

c. At the same time, they have an increasing sense of social responsibility in the honest exposure of guilt.

The above conclusions seem to justify the following pedagogical application: Class punishment should be used less with older than

with younger children. Its use, even with younger children, is questionable, since a considerable number of these react strongly against it.

The following additional conclusions bear on the general subject of punishment, and confirm what other studies have already asserted:—

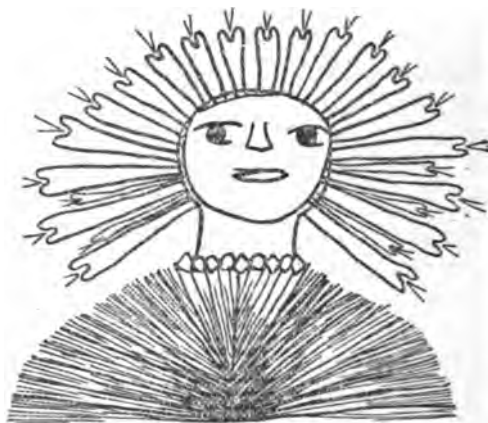
In early years, the sense of justice is based on feeling and on faith in authority; as age increases, it is based on reason and understanding.

Young children regard punishment as a means of balancing accounts with the offense. Its purpose as a social protective measure, a preventative of further trouble, is understood better as age increases.

PERSEUS AND MEDUSA.

DAVID STARR JORDAN.

(With apologies to Ovid.)



Medusa.

Once there was a lady, and she lived in a house all alone by herself, because her neighbors did not like her, and she could not keep any servants. The trouble with her was, that instead of hair, she wore snakes, and her eyes turned everybody they looked on into stone; and whenever a tramp came along, and knocked on the door, and called for the lady of the house, she had only to look on him a moment and he turned into stone. She had, in her back yard, a whole pile of people, leaned up against the fence, and every one of them had been turned into stone, because whenever she looked at anybody it turned him into stone.

The neighbors got very tired of her, and so they told Perseus about it; and Perseus went off and borrowed a pair of wings that belonged to Quicksilver,* and he fastened them on his feet. Then he went around to Venus, and borrowed a nice, new looking-glass she had, and he took that in his left hand. Then he went out and

* "Quicksilver is the same as Mercury, and sounds better."—Knight.

got his big broadsword, and took that in his right hand. Then he flew away with the wings to the house where Medusa lived; but he did not dare look at Medusa, for fear she would turn him into stone; and he felt how ridiculous he would look turned into stone,

**I**

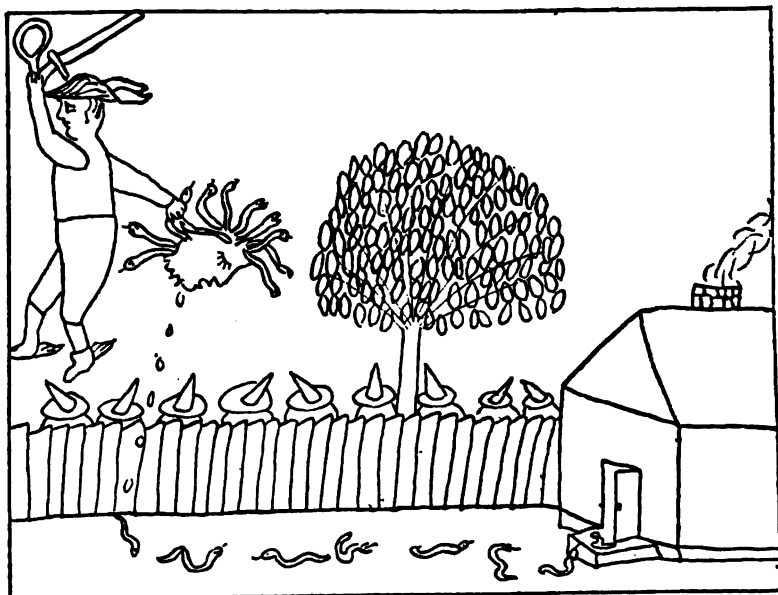
Medusa is taking a nap on the sofa. Perseus looks in Venus's looking-glass, and a backward spear over his shoulder at Medusa's head. There is a picture on the wall.

with wings on his feet and a looking-glass in his hand! So he walked on his toes backward, up to the house, and knocked with his hind foot on the door. Nobody came to the door, so he turned the knob and went in backward. Now, it happened that Medusa was taking a nap on the lounge, and there was n't a single serpent, by good chance, that was awake. So Perseus backed up to the lounge, holding the mirror before him, so that he could see where he was going, until he was opposite her; then, looking into the mirror, he swung his sword over backwards and cut Medusa's head right off; and then he grabbed it in his hand by the frizzes of snakes, and went right out through the door, without saying good-by or anything, and flew away with the head in his hand.

Then he did not know what to do with the head; and the

blood dripped out of it and fell into the sand, and every drop that fell made a new snake; and the track over the desert of Libya where he went has been filled with snakes ever since, made out of that blood. Finally, he carried the head around to where he saw a great big whale swimming after a young lady that somebody had tied to a rock out by the sea. So he just turned the face of Medusa on the whale, and changed the whale into stone; and the whale lies there, and has been stone ever since.

But Perseus did not know how to get rid of the head. He never dared to look at it at all, for fear it would turn him into stone.

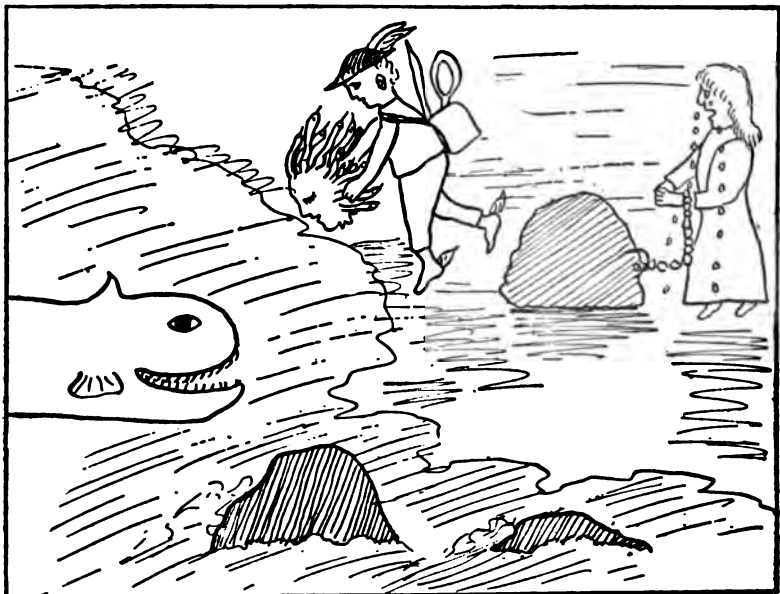


I

Perseus flies through the air with Medusa's head, which he has just got. He leaves her house behind him. In one hand he holds the glass and spear. Blood drips from the head. On the ground the blood had turned into snakes, and they go crawling about.

Finally, as he flew about on the wings of Quicksilver, he saw old Jove taking a morning stroll through the skies, and he told Jove that he might have the head if he wanted it for his museum. And Jove was much pleased, for he liked all sorts of odd things, and he took it from Perseus and hung it up on one of the stars, and there it hangs yet, and if you go out any night and look up into the sky, off on

the northeast side of the sky, you will see that head way off in amongst the stars. There are three stars of them, making a triangle away on the other side of the North Pole from the Big Dipper, and the star the head is fastened to is the one in the square corner. And when the head was hung up, its face was turned toward the earth, and it changed the earth into stone, and that is why there is



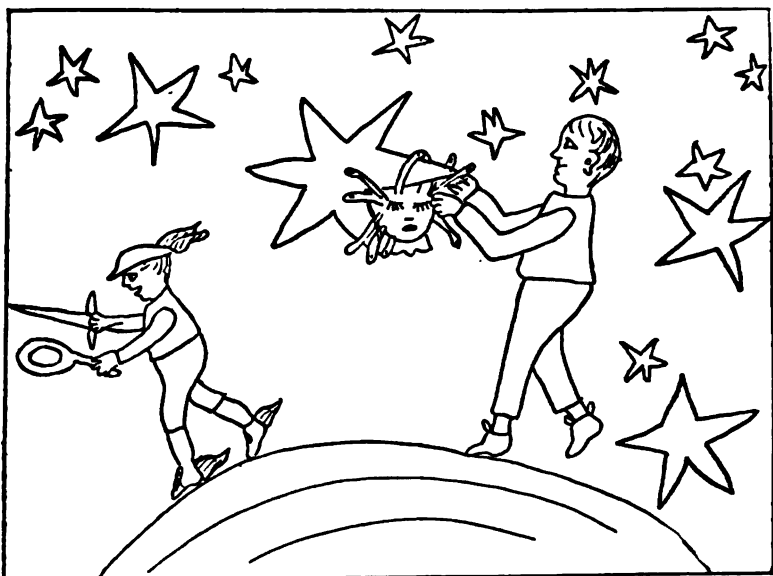
III

The whale comes to gobble up the girl, and she is crying. Perseus comes with Medusa's head and turns the whale into stone.

so much rock and stone on the earth now. And some say that the moon was changed to stone, too. And up in the sky the old head of Medusa is hanging yet, and if you go out at night, you want to look at it over your right shoulder.

COMMENTARY AND QUESTIONS BY THE EDITOR.

This story is one of many told by Dr. Jordan to Knight and Barbara. The manifest delight of the children, and their wish to have the stories repeated over and over again, suggested to a friend



IV

Jove takes the Medusa head from Perseus and hangs it on one of the stars. Perseus is very glad to get rid of the head.

who had the *entrée* of the nursery the desirability of preserving some of them for other children. She was allowed to bring in a stenographer, who caught this story as it was flying about the room. Others were added from time to time, drawn from nature, myth, and fancy, or from all three combined. The stories were type-written, and gave pleasure to other children, some of whom drew pictures in illustration of the bits that caught their fancy, until, by degrees, the stories have grown into the material for a little book, which is about to be published.¹ The illustrations for this story were drawn by a girl of twelve, who had had no teaching in drawing, but who had drawn and read a good deal. She simply read the story, and had no suggestion from her elders. The illustrator wrote the description that appears under each picture. Since a college president has no right to say anything, even to his own children after dinner in the nursery, for which he is not willing to stand

¹ *The Book of Knight and Barbara: Being Queer Tales Selected, Corrected, and Illustrated by Children.* David Starr Jordan, Narrator; Louise Maitland, Editor; Harriet Hawley, Reporter. Whitaker-Ray Company, San Francisco. (In press.)

responsible before the public, I should like to raise the following questions:—

1. Is it ever justifiable to present one of the world's great classics, which has been given its form in a period of highly developed civilization, in any but its standard dress? or,

2. Should an art product foreign to us, in time or space, ever be translated into terms of our environment, or should we wait until we can go over into its environment? or,

3. What will be the effect upon a child's ability to enter later into the setting and spirit of a past age if he has had the persons and events translated into terms of the vernacular of 1896, such as "tramp," and "backyard"?

4. But, on the other hand, has not the effectiveness of Christianity been in some measure due to the fact that its story has been translated into every mode of life and into every vocabulary used by men or children?

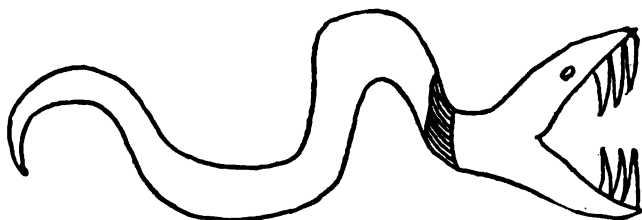
5. Is this story really translated into terms of a child's native interest, or is it, like Robert Louis Stevenson's *Child's Garden of Verses*, a childhood expression of remembered sympathies? or,

6. Is the pleasure in a phrase like "knocked with his hind foot on the door," due to the fact that the children enjoy the humor, or that the adult enjoys the mystification of the child?

7. How does this story as told compare with the stories told by children, and printed in the earlier numbers of these *Studies*?

8. What light do these drawings, made by a girl of twelve, throw upon the impression made upon her mind by the story?

9. Is it not possible that the pleasure of telling a story like this to one's children after dinner, to their visible delight, may be a sufficient justification for its existence?



Another sea-beast.

CHILDREN'S ATTITUDE TOWARD PUNISHMENT FOR WEAK TIME SENSE.

DAVID S. SNEDDEN.

The original object of this study was to determine to what extent a certain punishment was considered unjust when inflicted on a child, because, owing to his failure to realize the time, he had come in late.

The following story was read to the children in the schools of Riverside, San Mateo, and Napa counties, and they were asked to write their opinions as to whether the punishment was just, or unjust, and why:

"One day, when I was about seven years old, I went to a neighbor's to play; and my mother told me to be back by six o'clock. I was enjoying myself so much that I did not know how fast the time was passing, until I noticed it was getting dark. Then I ran home as fast as I could, but it was half-past six when I got there, and the family had been to supper. My mother scolded me for being late. Was it just or unjust, and why?"

Papers were written in answer to this test by 2536 children, from six to sixteen years old. All the ages were well represented, though the number of papers was somewhat larger in the intermediate, than in the first and last years.

The answers fell naturally into three main groups: (1) Those declaring the punishment just; (2) Those declaring it unjust; (3) Those giving a qualified judgment.

Of the children who think it just, one group does so on the ground that it will "teach obedience," "teach carefulness," "learn him not to be thoughtless," "prevent him doing it again." Throughout these answers the prominent reason for justifying the punishment is not the fact that a fault has been committed, but that the scolding will help matters for the future. Hence, the object of the punishment is remedial, under which subhead, accordingly, these answers have been entered.

The second subdivision under the main heading "Just," includes the answers of those who assert that the scolding was just, because

the child "should have remembered," "should not have been absorbed in play," "ought to have watched the time," "was careless." These children recognize that the offence was not premeditated or wilful; but, despite the mitigating circumstances, they feel that it was right to scold the child because he had not exercised forethought. These cases have been grouped under the subhead, "Punishment for direct fault."

The third class of reasons under the heading "Just," embraces those that show no consideration of the special circumstances of the case. These children think the punishment wholly just because the child "disobeyed," "didn't mind," "didn't come home," "stayed too long," "was told to be at home." In all the answers classified here, it is evident that the writers consider the punishment as the natural consequence of the offence. The retaliatory spirit is strong, coupled with which there is unquestioning acceptance of authority. These cases have been entered under the subhead, "Punishment for direct fault."

A few children assign no reason for the justness of the punishment, and a subhead is left for these.

It necessarily happens that a few answers do not fall easily into one or the other of the above subdivisions, but in the main the place of any answer is easily determined.

Of those who think the punishment unjust, the larger number think it so because he "didn't think," "forgot," "could n't help it," "did not know the time," or, "it was a mistake," "a half-hour makes no difference." These cases were entered under the subhead, "Offence was unconscious."

A smaller class distinctly assert that the intentions of the child were good. He should not have been punished, because "he intended right," "he came home as soon as he thought," "he did not intend to stay so long." These answers are embraced under the subhead, "Intention was right."

A small number think the punishment unjust because the child was so young. He "was only seven years old," "was too young to know better." A separate subhead has been reserved for these answers, and another for those which assign no reason for the injustice of the punishment.

The third main division includes the answers of those children, who, instead of declaring the punishment just or unjust, qualify

their judgments. Their attitude is indicated by such expressions as, "if he had done it before," "if he would be likely to do it again," "if he knew it was six," "depends upon circumstances," "he deserved credit for trying."

The reduction of the results shows that seventy-eight per cent. of all the children thought the punishment just. Ten per cent. do so because it was remedial; fourteen per cent. because of the neglect of the child; forty-eight per cent. because of the direct fault; while six per cent. gave no reason.

The punishment was characterized as unjust by twenty per cent. of all the children; by thirteen per cent. because the offense was unconscious; by two per cent. because the child intended right; by one per cent. because of the youth of the child; while two per cent. gave no reason. A qualified judgment was given by two per cent.

The above percentages are for the whole number of children. If, however, we take the corresponding percentages of the children of each age, we find a distinct variation from year to year, which constitutes a well-marked upward or downward tendency under each of the different headings. This movement is more evident if we average the percentages for groups of years. Taking the average of the percentages for the first five years (six to ten), of the next three years (eleven to thirteen), and of the last three years (fourteen to sixteen), we get the results shown in the following table:—

	6 to 10 years.	11 to 13 years.	14 to 16 years.
<i>Punishment just</i>	84 per cent.	76 per cent.	73 per cent.
Punishment remedial	2	11	20
Punishment for neglect	9	17	16
Punishment for fault	61	43	37
No reason given	11	6	2
<i>Punishment unjust</i>	15	21	23
Offence was unconscious	10	14	14
Intention was right	1	3	5
Child was young	1	2	3
No reason given	3	2	1
<i>Qualified just or unjust</i>	1	2	2

The following facts are observed in the above table: (a) The percentage of those who regard the punishment as just decreases with age, whilst the percentage of those calling the punishment unjust increases. (b) With advancing years, fewer children fail to

assign reasons for their beliefs. (c) There is a rapid increase in the percentage of those regarding the punishment as just because of its remedial effects, while there is an equally rapid decrease in the percentage of those who would punish for direct fault. (d) The percentage of those believing the punishment unjust shows increasing tendency in all cases where reasons are assigned.

An examination of the above tendencies will show that, with advancing years, there is a steady development of the ethical judgment in children. In the early years, most of them would accept the full penalty without any regard for the peculiar circumstances of the case. They think little about the remedial effects of the punishment, and ignore the good intentions of the child. This attitude is not unlike that of partly civilized peoples, and it still survives in many of the theories of our legal codes. "Ignorance of the law excuses no one," expresses an attitude towards offenders that was once dominant, but in this age we know that judge and jury tend to attach greater and greater importance to the circumstances surrounding the individual. So with the children. Sixty-one per cent. of the younger ones would accept the full penalty without question. "He did not do as he was told," therefore, without any consideration of peculiar conditions, "he should be punished."

Of the older ones, only thirty-seven per cent. take this primitive and childish view of the situation.

On the other hand, the developing ethical sense is shown by the fact that in the earliest years only two per cent. of the children justify the punishment because it is remedial, while in the later years twenty per cent. justify it on that ground. Of those who accept the penalty, but justify it on the ground that the carelessness or oversight of the child demanded correction, the percentage in the earlier years is only half that in the later years.

A constantly increasing percentage think the punishment unjust. These children have taken into consideration the attendant circumstances, and believe the mother should have done so. Here the developing ethical sense is shown. It is also conspicuous in the answers of those who qualify their judgments. Here, it seems to me, we have the highest possible type of answer. The papers suggest candor, sympathy, and judicial fairness.

A word might be said of the sex differences which the study develops. Eighty-two per cent. of the girls justify the rigorous

enforcement of the penalty, as against seventy-six per cent. of the boys. Girls show a considerably greater appreciation of the remedial effects of punishment than boys, while a very much smaller percentage would condone the offence because of its unintentional character.

The study seems to justify the following conclusions:—

a. The great majority of young children do not discriminate kinds and degrees of offences. Hence the establishment of numerous rules of conduct for children is ineffective and undesirable.

b. Only with advancing years do children recognize the purpose and value of remedial punishments. All punishment is regarded as vindictive, or "getting even," in the earlier years.

c. Young children are not inclined to condone a fault due to weak time sense. They consider only the direct fault involved in the breaking of a promise or a command.

d. Young children tend to demand that all offenders be punished alike, without reference to mitigating circumstances of individual cases, or to the involuntary nature of the offence.

In conjunction with the preceding study, an effort was made to answer two questions that must often occur to those engaged in studying children by statistical methods. These are: (1) To what extent will the results obtained from one set of papers vary from those obtained from another set? (2) How many data is it necessary to examine in order to get stable and determinate generalizations?

The material for the foregoing study was collected and worked up in two divisions. The first group of data (which will be referred to as Study A) contained 951 papers; the second group (designated Study B) contained 1585 papers. These two groups came from counties in California, 500 miles apart. The ages from seven to sixteen were fairly well represented, only the sixth year having a representation inadequate for good results.

The first question is answered by the study in a remarkably decisive way, as an examination of the following comparative table will show:—

TABLE COMPARING RESULTS FROM STUDIES A AND B.

		Age—6 to 10 years.	11 to 13 years.	14 to 16 years.	Average.
<i>Just</i>	{ A	81 per cent.	79 per cent.	74 per cent.	78 per cent.
	{ B	85 "	75 "	74 "	79 "
No reason . . .	{ A	10 "	5 "	2 "	5 "
	{ B	11 "	6 "	2 "	6 "
Remedial . . .	{ A	5 "	11 "	18 "	12 "
	{ B	2 "	10 "	20 "	9 "
Neglect	{ A	11 "	18 "	13 "	15 "
	{ B	9 "	16 "	16 "	14 "
Fault	{ A	55 "	47 "	40 "	46 "
	{ B	63 "	38 "	35 "	48 "
<i>Unjust</i>	{ A	18 "	19 "	22 "	20 "
	{ B	14 "	22 "	25 "	20 "
No reason . . .	{ A	5 "	3 "	2 "	3 "
	{ B	3 "	2 "	1 "	2 "
Unconscious . .	{ A	11 "	15 "	17 "	12 "
	{ B	10 "	15 "	16 "	13 "
Right intention .	{ A	2 "	2 "	3 "	2 "
	{ B	1 "	2 "	5 "	2 "
Child too young	{ A	1 "	1 "	2 "	2 "
	{ B	1 "	2 "	2 "	2 "
<i>Qualified</i>	{ A	2 "	3 "	4 "	3 "
	{ B	1 "	2 "	2 "	2 "

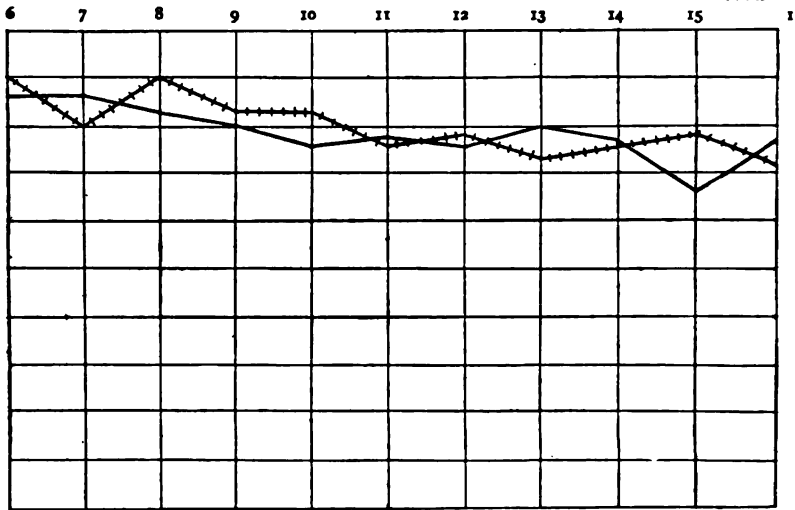
The close correspondence is striking. It will be seen that in Study A, seventy-eight per cent. of the children thought the punishment just; in Study B, seventy-nine per cent. In study A, twenty per cent. declared punishment unjust; in study B, twenty per cent. The averages for the subdivisions of the main-heads are also very similar. Thus, in Study A, forty-six per cent. of the children think the punishment just, because of the direct fault of the child; in study B, forty-eight per cent.

On comparing the average percentages for groups of years in the same table, we observe also a close correspondence. The trend is identical in both cases, while the actual percentages show relatively only small differences. The general laws developed in the main study hold true in all particulars in each minor study.

The general agreement of the two studies is even more evident when we compare the results running through the series of years, as is done in the following charts:—

I.—PUNISHMENT JUST.

STUDY A _____
STUDY B _____



II.—PUNISHMENT JUST, BECAUSE REMEDIAL.

STUDY A _____
STUDY B _____

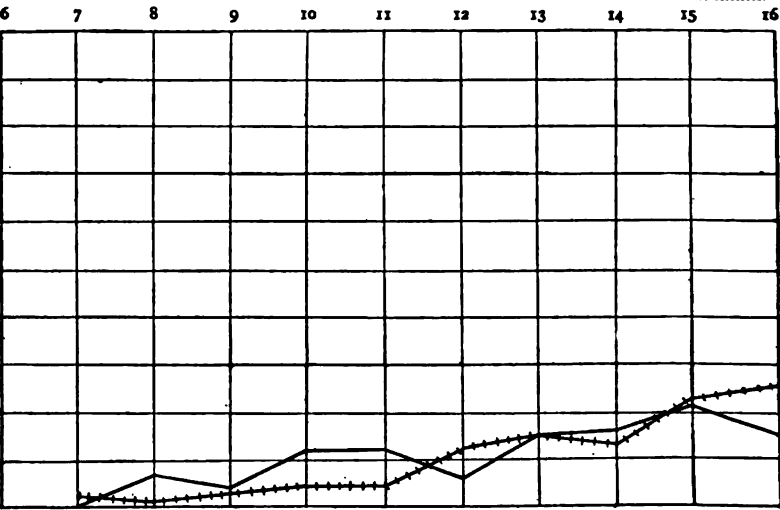


Chart I shows the percentage of children who thought the punishment just. The fairly uniform downward tendency is evident in both cases, while the close agreement of the lines shows that the quantitative values obtained in the two studies are not materially different. Chart II shows the close parallelism in the percentages of those who justified the punishment because of its remedial effects. The line representing study B is slightly more uniform than the other, undoubtedly because it contained 600 papers more than the first.

The charted results for the other subdivisions of the study agree in the same manner as the above. Hence, we have unquestionable proof that, in a general way, the results of each study are stable and determinate; and the effect of an increased number of papers would only be to diminish minor variations.

The second question is also now partly answered. A thousand papers will give results that may be relied upon, if we wish to find out gross percentages, or large movements, in a study capable of division into a few large and fairly well-balanced divisions.

In a more complex study, or in a case where we wish to institute comparisons for particular years, or between the sexes, it is evident that we must increase our data. But this study proves that, having determined the amount of data necessary, we have every reason to expect law-abiding results as verifiable as those of other sciences dealing with organic life.¹

¹ A preliminary study on this material was made and printed under the title, *Punishment for Weak Time Sense*. By Earl Barnes. In Transactions of the Illinois Society for Child-Study, Vol. I, No. 3.

CHILDREN'S MOTIVES.

ALMA PATTERSON.

The aim of this study was simply to obtain a better understanding of the children observed, in order that ethical lessons and methods of discipline might be adapted to their moral status.

The following story was told to the class—a first-year grade—as their lesson in literature:—

“Once there was only one fire in the cold Northland. An old man and his little son took care of this fire, and kept it burning day and night. They knew that if the fire went out, people could not live there, and the white bear would have the land all to himself.

“One day the old man became very sick, and his son had to take care of him and keep the fire burning. But one night, after many days and nights of watching, the little boy fell asleep. Then the white bear ran as fast as he could, and jumped upon the fire with his wet feet, and rolled upon it. At last he thought it was all out, and went happily away to his cave.

“But a gray robin was flying near, and when the bear went away, she flew down and looked about till she found a tiny live spark. This she fanned patiently for a long time with her wings. Her breast was scorched red, but she did not give up, and after awhile the blaze sprang up again. Then she flew to every hut in the Northland, and everywhere that she touched the ground a fire sprang up.”

The children reproduced the story orally next day, and told it in narrative drawings on the blackboard and at the sand-table. Then, after a lapse of two weeks, these questions were asked of each child individually:—

1. Which would you rather be like, the robin or the white bear? Why?

2. How can you be like it?

Forty-nine answers were received, twenty-seven from boys, ranging in age from six to eleven years, and twenty-two from girls of six to ten years.

Reducing the numbers to the basis of one hundred, or to percentages, four boys wished to be like the bear, because of his safety and independence. As they said: “Nobody could hurt him,” and “He could go alone on the cool grass.” Not one girl chose to be like the bear.

Fifty-one boys and forty-five girls expressed a desire to be like the robin. Of these, ten boys gave selfish reasons for their choice, such as safety and greater freedom. One ten-year-old boy said: "I would rather be like the robin, so that I could fly around the world and have a good time." Eight girls showed selfishness in their choice; two wanted to be like the robin, "because it is prettiest;" two, "because the robin is a red bird," and four gave as their reason, "So that I could fly."

Forty-one boys and thirty-seven girls saw the spirit of goodwill shown by the little bird, and chose to imitate it. Thirty-four boys and twenty girls wished to be like the robin, "because it was the best;" or, "because it does more good than the bear;" five girls, "because the robin helped the old man." One seven-year-old boy, who seldom, if ever, heard a kind word at home, wanted to be like the robin, "because it was kind." Others elaborated their answers, telling much of the story, but their meaning was the same.

The following lines show the choice of boys and girls taken separately, the upper line in each pair representing boys:—

===== Selfish.

===== Unselfish.

The answers to the second question varied so much that they scarcely admit of classification. Some of them seemed to lack the spontaneity of the first answers, and to savor of what had been taught to the children, or of the training given by the necessities of their home-life. For example, a boy of ten said: "Be good; mind your teacher, and father, and mother, and everybody." Two children, a boy and a girl, each seven years old, answered: "If anybody does wrong to you, do good to them." One girl, the oldest of several children in a poor family, gave as her idea of being like the robin, "Be good; work."

Still, the answers show what precepts have impressed the children, and to some extent indicate the child's character, as six months' subsequent study of these children has proved.

One seven-year-old boy, a stolid little foreigner, took the story literally, receiving no moral lesson from it. "Because the bear hooks," he wanted to be like the robin; and to attain that end, he would "put paint on and be red."

Fifteen per cent. of the boys and eighteen per cent. of the girls applied the story to the letter, saying: "I would build fires," or, "build the fire in the morning." Seventy-one per cent. of the boys and sixty-four per cent. of the girls gave the answer, "Be good;" qualifying the expression so as to include in this, order, kindness, self-restraint, helpfulness, industry, obedience, truthfulness, happiness. The following are typical answers from a boy of six: "Be good; don't say naughty words; don't tell stories;" from a boy of eight: "Be good; don't talk in school; keep your feet still;" from a boy of eleven: "Be good; help your mother; sing of nights." A seven-year-old girl answered: "Light a fire and make people warm." Another girl of seven said: "Be good; help mamma;" one, eight years old, said: "Be happy; don't say bad words." Others gave such answers as: "Bring in wood;" "Tend the baby;" "Take care of brother if he's sick."

At these ages, little sex-difference is discernible, though the boys give a broader ethical application of the story than the girls.

It is said, that children are naturally selfish and rightly so, as self-preservation is Nature's first law. With very young children, this statement is certainly true. But these little ones come from families of the very poor, and many of them have had little moral training—one might almost say, that, like Topsy, they "just grewed." This study seems to indicate that there is in them such a thing as innate kindness and benevolence, and that unselfishness characterizes the majority of them.

THE CHILD AS A SOCIAL FACTOR.¹

EARL BARNES.

In presenting this paper, I should like to inquire,—first, What is there peculiar in the mind or character of a child that makes him a social factor distinct from the adult? secondly, How does society try to take advantage of these peculiarities for the realization of its own purposes? and, lastly, How does the child actually react upon society and affect it?

Any one who has worked much with children must be impressed with the fact that they are, in some of their views and activities, extreme radicals; in others, extreme conservatives. These two tendencies are seldom mixed; but a child is a radical now, a conservative two minutes later, and a radical immediately afterwards. In children's traditional games, we have an illustration of the way in which they cling to the form, even of words and jingles, long after all meaning has faded out of them. So, the stories which they love must be repeated exactly, without the omission or change of a word, or the child complains. On the other hand, in matters of ethics, sociology, and philosophy, the child is an extreme radical, and pushes his logical conclusions to final consequences. The wise old grandfather may tell of the glories of the war and the greatness of Prince Eugene,—“But what good came of it at last?” quoth little Wilhelmine.

How can we explain this curious two-sidedness of the childish mind? A study of the history of civilization seems to show that there are three ways in which the race has achieved, and in which we may achieve, what we call knowledge. We may accept what we are told—authority; we may reason things out—rationalism; or we may laboriously build up our knowledge by increments—experience. The early Middle Ages rested in authority, and people gradually passed over in the eleventh and twelfth centuries, until they rested in logical processes, while we rest in experience.

Now, a child must at first rest in authority; his very preservation depends upon it; and if he is well trained, he comes to feel the

¹ Read before the National Educational Association, in Buffalo, 1896.

satisfaction of strong and secure support. A dogma in fields where he does not know—and there are few fields which he does know—is as restful to his eager, searching mind as his father's strong arms are to his body. The fact that his baby brother was brought in the night by a stork relieves his mind of its struggle to know—gives the blessed rest of belief, and sets the child's nature free for self-realization in other directions. So, after an hour of unorganized play with his comrades, where he has been distracted and tired with all the conflicting impulses of the little group, the child turns with relief to "Here comes three drakes a-roving," and insists on its being played with perfect fidelity to every detail. This gives him balance, rest, and freedom for self-realization in some special parts of his nature.

But there is in every child a natural tendency toward logical activity. As his muscles or his vocal organs tend to move in certain related series, so his mind tends to work in logical sequences; and just as the exercise of the body gives him pleasure, so the exercise of his mind produces a certain satisfaction. This activity certainly exists in children from a very early age, but various recent studies point to the age of ten to thirteen as the period of its great activity. Thus, in a study of the theological beliefs expressed by a thousand California children, I found that they generally accepted what they were told without serious questions until about the age of ten or twelve, when they often indulged in such reasoning as: "Trees cannot grow without air; the air is only six miles thick around the earth. I can see six miles, and I cannot see heaven; so heaven must be outside the air, so trees cannot grow in heaven, and the Bible must have made a mistake."

In my own experience, I remember arguing with my father through the long winter evenings about the white men's right to this country. A thing belongs to the one who has it first; the Indians had America first, so the white men had no right here. I remember growing very much excited over this problem, and I felt that we were robbers. A little girl acquaintance, eight years old, said, not long ago: "There are two things that puzzle me,—who made God, and what comes after the end of time." Helen Keller raised the same questions, and all children reach out intellectually for the ultimate meanings of things.

As children pass into maturity, they find that knowledge rest-

ing in authority does not fit the conditions of their own life. It is not up to date. The child also finds that the knowledge derived from pure logic does not fit a world filled with warring personalities; and so, for authority and rationalism, he gradually substitutes an eclectic half-knowledge which he calls experience. After a time, the adult comes to find in this common-sense, this experience, these half-truths of experience based in necessity, a certain rest and satisfaction. He is no longer either radical or conservative,—he is practical. He worships at the shrine of necessity. But against this practical world, this eclectic resultant of experience, the child is always in rebellion. He cannot understand how his father, who so fiercely denounced Grant a month ago, can accept his presidency so calmly now that the election is passed. He cannot understand how the community can go on quietly about its business, and allow an old money grinder, who has a mortgage on a poor widow's farm, to foreclose it and turn her into the street. He cannot understand how his mother can say it is wrong to lie, and then say she is out when she is in. The enthusiast and the reformer are simply grown-up children who retain their earlier modes of thinking, according to authority or logic.

The child either accepts higher knowledge by direct gift, or reasons out conclusions for himself. The hardened adult lays aside authority and doubts logic, and simply accepts cold facts of experience. Who cannot recall his childish pains in adjusting his mind to the ill-fitting garments of experience?

With children, as with adults, it is doubtless true that we are most conservative concerning things that are immediately related to our daily lives. Radicalism deals with distant things. The conservative Puritan New Englander was very radical concerning southern slavery, and eastern men are very radical, or rational, concerning the Chinese question in California. Intimate experience overbears logical reasoning, be it ever so perfect. On the other hand, little matters of every day experience quickly become habits in our minds, and are little amenable to pure reason. Thus it comes that the child is a conservative in the matters of his own everyday life, and a rationalist, or radical, touching things more removed from his common life.

If this analysis is correct, the child as a social factor will be a conserver of forms in details touching his own life; and of beliefs in

fields where he has no experience, providing these beliefs can be harmonized with the logical tendencies of his mind.

But in all matters touching the larger social life around him — where he has had little experience, and where half-truths of expediency based in seeming necessity have come to prevail — he will prove an anarchist through the logical energy of his mind.

Now, how does society take advantage of these peculiarities in the child's subjective life? The attitude of society toward children will always be determined by what society wants done, and by its theories concerning the nature of childhood. Society says: What is the nature of this new creature, this on-coming generation of children, and what do we want it to do? The chief function of society is to carry along, protect, and develop a man of accumulations, which it calls civilization. To society, this civilization is the Ark of the Covenant which must be maintained with the most sacred care. It is the foundation of existence, and if this civilization were disturbed, society believes it would straightway perish. Hence, society, from the point of view of what it wants done, must train each on-coming generation of children to carry this civilization along gently and undisturbed. To accomplish this, society loads the minds of children with authoritative beliefs, frightens down or leads astray their logical activities, and makes them suspicious of experience.

The tendency of children to seek self-organization and freedom, through relegating the little details of life to forms and habits, has been eagerly seized upon by society, and used to form the mind and character in authoritative molds. Thus, all partly civilized people make the ceremonial of daily and religious life the basis of education. The Aztecs or the Chinese well illustrate this. They teach the child how to behave toward his parent, his teacher, his neighbor, his king, his priest; and his mental energy is so absorbed and used up in this ceremonial exercise that the logical faculties never awaken, and the voice of experience is drowned. The child, decked out in the ceremonial of life, becomes a safe servant to bear the civilization of the past.

Attempts have been made to accomplish the same results by seizing boldly on the radical tendencies of youth and leading the logical powers out along lines where they would do no harm, with a view to ultimately using these powers in the service of supporting

the old civilization. The Jesuits tried this, but such men as Descartes escaped from the most skillful leading and brought disaster to the burden of ideas society was trying to protect. The Russian government, through its support of universities, is trying the same dangerous experiment to-day, and she is sure to destroy herself. The only safe way for society to protect her civilization unchanged from this ever-new force of childhood is to seize the natural tendency toward conservatism in the small matters of daily life, and smother logic and experience under a burden of forms.

Within these last generations many prophets have arisen who have maintained that children could be safely developed on all sides of their natures, but practically almost no one practices it. The church, the state, societies and individuals,—all use the school to teach monarchy, republicanism, American patriotism, German patriotism, French patriotism, Catholicism, Protestantism, temperance, or whatever other beliefs it is felt ought to dominate those who are to uphold civilization.

In the last place, let us inquire what is the actual effect of the child upon society. Biologists often raise the question whether the human animal can be modified fast enough so that he can maintain the accumulating and rapidly developing mass of civilization which he is trying to carry to-day. Our hope in this direction lies with children. Each new generation must start afresh; and in taking upon itself the accumulated burden, it tends to drop those parts which experience shows that the passing generation found too heavy. The results of our studies of hygiene, or ethics, or art are applied primarily to children. The old smoker is allowed to smoke, but the child must be protected. The father who has had a childhood of toil tries to give his son a more leisurely youth. And so, in a thousand ways, each generation that passes tries to give to the on-coming generation a more reasonable load of civilization than it has carried; and here lies the hope that biological adjustment may keep pace with advance in civilization.

At the same time, this constant return to purely logical activity with each new generation keeps the world supplied with visionaries and reformers—that is to say, with saviors and leaders. New movements are born in young minds, and lack of experience enables youths to eternally recall civilization to sound bases. If each generation started where the last one left off, imagine where

Lord Chesterfield's sons would have been to-day. The passing generation smiles and cracks its weather-worn jokes about youthful effusions on commencement days; but this ever-new, ever-hopeful, ever-daring, ever-doing, youthful enthusiasm, ever returning to the logical bases of religion, ethics, politics, business, art, and social life,—these are the salvation of the world. And this salvation must be wrought over by each new generation.

The influence exerted by the child upon society is not to be sought alone in the fact that the children are the coming generation, and that when they are grown they will be society; but they have at once and immediately a profound influence. The father and mother, inclined to sink into mere time-servers, following lives their experiences have taught them to be safe, are constantly shocked into new life and new action by the radical views naturally presented by the children, less bound in by experience than they are themselves.

Then, too, all that is newest in the schools of religion, in social and political thought, in literature and art, is brought home and given to the parents through immediate contact. If my immediate problem were to educate the adult population of the United States, I should approach the people through their children. The man of business who would scoff at religious, artistic, or ethical ideas presented by an adult, listens with sympathy and respect to the same ideas presented by his child. The very efforts he makes to avoid robbing his child of what he may consider childish enthusiasms, lays him open to the influence of these same enthusiasms.

And so, the child with his tendency to preserve the little forms and ceremonies of daily life, and to go ever back to logical sources for his beliefs in the larger fields, is preyed upon by society which wishes to form and shape, and mold him to be the preserver of what it considers of transcendent value.

In China, society succeeds and civilization stands still. With our larger freedom, the child throws off some part of the useless burden, expresses anew the external ideals of life, and even reacts upon the adult so as to retard his hastening decadence, and civilization advances steadily onward. With increasing freedom in the study of realities, and in living schools, our children will bring us still larger life with the birth of each new generation.

Studies in
'Education

X.

STUDIES IN EDUCATION

EDITED BY

EARL BARNES,

Professor of Education in Leland Stanford Junior University.

APRIL, 1897.

	PAGE.
CHILD-STUDY: GENERAL CONCLUSIONS—Earl Barnes	363
TWO CHILDREN'S STORIES—Margaret Graham Hood	369
BIBLIOGRAPHY OF THE PUBLISHED WORK OF DR. G. STANLEY HALL — Earl Barnes	371
THE INTELLECTUAL LEADERSHIP OF GERMANY IN THE NINETEENTH CENTURY—Mary Sheldon Barnes	380
THE HISTORY OF EDUCATION: CONCLUSIONS—Earl Barnes	391
THE PROGRESS OF THE GODS—Edward Howard Griggs	396
NOTES	397
INDEX	398

VOL. I.
No. 10.

STANFORD UNIVERSITY.
1897.

\$1 a Year.
15 c. a Copy.

STUDIES IN EDUCATION.

This number completes the series of *Studies*, as projected a year ago, and no more will be issued before 1899, possibly not then. We can at present furnish these ten numbers for one dollar and fifty cents, or bound in cloth for two dollars, postage prepaid.

Address,

EARL BARNES,

Stanford University,

California.

Entered at the Post Office in Stanford University as Second-class Mail Matter.

Copyright applied for, 1897, by Earl Barnes.

CHILD STUDY.

GENERAL CONCLUSIONS.

EARL BARNES.

Any one who has read these *Studies* carefully must feel that they deal with phenomena that fall within the realm of law. It is true that the data on which the articles rest have been mainly gathered within the State of California, but this is a State one thousand miles long, representing every form of material environment, from the orange groves and the Mojave Desert in the south, to the mountain forests and mining districts of the north. In people, too, we represent one of the most cosmopolitan populations in the world, so that our children are more representative of varied conditions of race and setting than could be found in the Mississippi Valley, or on the Atlantic Seaboard, or in any single country of Europe.

Now, notwithstanding the varied life from which our data have been drawn, we find that when we take any simple strand of childish thought or feeling as expressed by one hundred or more boys and the same number of girls, for each age of the school period, and analyze the results, arranging them in series according to age, we have clearly defined movements, as law-abiding as any movements connected with organic life.

No one can examine the tables and charts connected with the studies on children's stories (p. 15), the development of the historical sense in children (pp. 43 and 83), children's superstitions (p. 123), children's interests (p. 203), children's ambitions (p. 243), or the various studies on discipline, without feeling that he is well within the domain of law. The effect of this realization on pedagogy must be profound. Instead of concentrating our attention on the seemingly accidental variations in personality, we shall seek increasingly to know and understand the universal laws underlying the development of human nature. Thus we shall have a background against

which individual variations will stand out boldly, enabling us to understand them, and conserve or discourage them, as seems best.

This conception raises the teacher from the position of a patcher of personalities to a co-partnership with the Divine Spirit in the development of a law-abiding soul in a law-abiding universe.

These studies have, too, an immediate bearing on practical pedagogy. Their lesson to teachers of history (pp. 43 and 83), reading (pp. 15, 58, 94, 156, 194, and the children's stories), and drawing (pp. 283, and children's drawings), are so clear that they cannot be misunderstood; while the studies on punishment, children's motives (p. 352), and children's attitude toward law (p. 254), are of immediate application wherever a child is to be trained into self-direction.

REMINISCENT STUDY.

He who sits down and carefully and honestly reconstructs from memory his own childhood in its moments of joy and grief, has given himself a medium through which he can see children as they are. The phenomena of childhood are without meaning until they are interpreted by the observer. A mere description of contracting muscles, falling tears, or other physical conditions, is comparatively valueless until interpreted into terms of thought, feeling, or purpose. The observer can never understand nor interpret any subjective state which he has not in some measure experienced himself. The greater part of our childhood's experience has passed into the background of consciousness and is not available for use. We need to call it back, to arrange it and re-vivify it by dwelling upon it in thought. For this reason, it is especially valuable to write out our reminiscences.

During the past two years, I have made use of such exercises in large classes, studying the special psychology of childhood, and we have done no other work which seemed to produce better results. It quickens our interest in childish activity by relating it vitally to our own egoistic interests. We see acts in their perspective and in their relations, as we cannot when observing a child, where ordinarily we know but the fragment that we see. Pursued in connection with other people, such study must expand our own childish experiences, thereby broadening our sympathy, quickening our understanding, impressing us with the value of individuality, and

helping us to estimate the value of environment. Further, there is a great range of fact, most vital to the educator, concerning our most personal life, which can be studied only through reminiscence. Such are the great fields of sex-life, personal ambitions, religious aspirations, etc.

On the other hand, it must be admitted that the results of such study may be very uncertain, owing to the fact that we tend to remember odd or peculiar things, that we confound family stories with real memories; that we can with difficulty locate childish events in time; and that our egotism often overpowers our honesty. Then, too, through dwelling on our personal reminiscences, we may be in danger of reaching a generalized form which will seem to exhaust the possibilities of child-life, and then of trying to read all children into our possibly narrow life. These difficulties can be in large part prevented by the direct study of children, by working with others, and by reading widely in autobiography. Even recognizing all these difficulties, we must still admit that it is only in such reminiscent study that we ever come face to face with the phenomena of subjective states of being that we wish to understand.

Emerson has expressed it all in his essay on the intellect: "It is long ere we discover how rich we are. Our history we are sure is quite tame; we have nothing to write, nothing to infer. But our wiser years still run back to the despised recollections of childhood, and always we are fishing up some wonderful article out of that pond; until, by and by, we begin to suspect that the biography of the one foolish person we know is, in reality, nothing less than the miniature paraphrase of the hundred volumes of the Universal History."

How far the results of these studies are valuable for purposes of generalization, it is hard to say. Studies based upon such materials have been printed on pages 18, 58, 98, 144, 175, 217, and 295. Most of these studies were made on data gathered in my classes in pedagogy in Stanford and Chicago Universities, and so they represent a selected body of people, and may not be fairly representative. The generalizations, however, in such studies as those on fear (p. 18) and memories of things read (p. 58) seem to have some permanent value. The individual studies, however, on pages 98 and 295, seem to me the most valuable forms of this method of study.

DISCIPLINE.

In our treatment of discipline we have presented a type (pp. 27, 71, 110, 149, 190, 228, 270, 299), intended to illustrate the statistical method of child-study. At the same time, this study, taken in connection with those by Darrah (pp. 213, 254), by Frear (p. 332), and by Snedden (p. 344), seems to establish certain conclusions of value in the treatment of children.

Of course, in such a study one cannot say what part of the result is natural tendency, and what part is a reflexion of the circumstances in which the child lives. In California all government is lax, and the children grow up in a very free atmosphere; moreover, the cosmopolitan character of our people would tend to cancel our particular home conditions. At the same time, it is well to remember that the *Studies* are not intended to attain pure scientific results (p. 5), but are intended as an examination of some of the steps in the development of the life of an ordinary American child, living in an American home.

The general development of our American children in their attitude toward law and punishment seems to be about as follows: Children at the period when our studies first deal with them, six or seven years old, have very little appreciation of general laws and regulations, or regard for them. They do, however, recognize the binding force of the personal commands of those in authority over them, even where the special circumstance would seem to excuse them from obedience. Their own reactions at this time against mis-doing in others is arbitrary and very severe; punishment is a means of getting even with the offender for some damage done, and the moral attitude of the culprit receives little attention. My own studies and Miss Darrah's disagree with Mr. Snedden's in indicating that young children do not demand equality of punishment, but accept arbitrary decisions with little question. In their attitude toward their own offenses and punishment at this period, they have very vague and indeterminate notions. They *feel* outraged or satisfied, but without knowing why.

This attitude begins to change by the time the child is ten years old, and changes more rapidly at twelve and thirteen. Ideas become clarified; the child not only feels but knows why he feels; he begins to recognize established laws as abstract existences; the

punishments he prescribes are less severe, and they take into account in some measure the intentions of the culprit. These tendencies increase up to sixteen years, the period where our *Studies* leave the child.

Through all this public school period, however, there is little recognition of a corrective aim in punishment. Only in the later years, and then in comparatively few cases, do the children impose a punishment that will correct the harm, or that will improve the culprit. Still, there is a growing tendency in this direction. These steps in the development of a child agree very strongly with the steps through which the race is generally supposed to have traveled (see p. 27). The results, too, encourage conservatism. Solomon and our Puritan forefathers are in a large measure justified, if we are to follow the tendencies indicated in these *Studies*. Where we modify their teaching is in pointing out that laws are useless in early childhood, and that intelligent self-direction, based on a recognition of law, can begin to take the place of obedience to personal authority by the time the child is ten years old.

CHILDREN'S PICTURES AND STORIES.

The children's pictures and stories presented in these pages were intended to throw some light upon children's ways of looking at things and thinking about them. They were also intended to illustrate a method of studying children through their least conscious expressions, and incidentally they throw some light upon the problems of teaching drawing, and selecting or making children's stories.

The chief value of this kind of study to the parent or teacher lies in the fact that it brings him close to the unconscious child, and thereby quickens his sympathy with the children about him.

The thing that must strike any one who studies these drawings and stories, is the fragmentary way in which the child thinks, or at least, the fragmentary way in which he expresses himself. He thinks in pieces and bits, and his mind seldom rises to the point of grasping any considerable range of thought at once.

This quality of broken thought gives full play to the association of ideas, and the child runs off at a tangent, weaving into his pictures or stories one element after another, until he has a fantastic combina-

tion, which, when it strikes lines that appeal to our fancy, seem to us wonderful creations of imagination (see p. 370, Hood).

The special generalizations that seem to be borne out by the drawings are:¹

A child at first rubs black on white as a mere exercise of muscular and sense activity (p. 22, fig. 1).

Next he makes marks which stand for detached details. This we have called the cataloguing stage (p. 62).

In the third place he pictures out the events in their successive stages so as to tell the story vividly—picture-writing (9 pp., 102–104).

In the last place he selects the material and the moment that express the dominant idea or feeling, and lets one selected scene stand for the whole (p. 154).

Professor Clark's study on perspective (p. 283) seems to bear out these same generalizations.

The children's stories seem to bear out Miss Vostrovsky's conclusions (p. 15). They are all full of movement, pushing vigorously on to the end. Names are prominent, and moral and æsthetic details are lacking.

In concluding these *Studies*, it may be well to remember that child-study is but a part of the larger general movement of our time, which is trying to understand the phenomena of human nature by direct inductive study. The student of pedagogy will find much of his best material to-day in biological journals, in current romance, in the newspapers, and wherever man is trying to express what he has seen by looking directly at human beings.

¹ These conclusions have been greatly strengthened, and possibly sometimes suggested, by an extended article recently prepared by Frederick L. Burk of Clark University. The article is still in manuscript.

TWO CHILDREN'S STORIES.

XII. THE TALKING HAT.

Once upon a time there was a nice hat that lived in a big band-box. It had beautiful yellow and green and purple feathers on it, and so it was a very proud hat. Every time the lady wore it to a concert it said,

"Oh I am *so* beautiful! There is no hat here so pretty as I am!"

One night when the lady went home she forgot to put the cover on the band-box, and the closet door stood and stared at the hat. The hat did not like it.

"You are a rude, vulgar door," it said, "Don't look at me!"

"If you don't want to be looked at," said the door to the hat, "do put the cover on your house!"

The hat said, "I sha'n't," because it could n't. Then it would not speak to the door any more.

That night a mouse came into the room and when the hat heard it it cried out to the door,

"Oh, shut, please, shut! There's a mouse that will eat up my feathers!"

But the door said, "Indeed I won't. You would not speak to me."

So the mouse came into the closet and ate all the beautiful yellow and green and purple feathers off the hat.

—*By Florence, seven years old.*

XIII. THE DEAD BABY.

That night when I laid you down to rest,
Your beautiful eyes were closed;
Your heart had stopped beating, my dear one,
And you lay there dead and still.
Then I began to sob and pray,
And I took you up to the hill,
And made you a little grave,
And left you there with the birds, my dear,
And the squirrels and buttercups gay!

—*By Florence, seven years old.*

COMMENTARY ON STORIES XII AND XIII.

MARGARET GRAHAM HOOD.

Florence's story and poem are submitted here because it is possible to trace every incident and influence that led to their production, and because I believe they grew very naturally out of her environment.

The facts of the *Talking Hat* are these: Florence's mother purchased a large black hat with several fine black plumes on it. The child was much interested in the purchase, but offered as a criticism that the plumes should have been "pretty-colored."

The hat was kept in a bandbox in a closet, and there being mice in the house, the mother frequently expressed anxiety lest they injure her hat. One night, hearing a mouse in the vicinity of the closet, she lighted a candle to investigate, and wakened the child by striking the match.

A few days later, the story of *The Talking Hat* was told without any reference whatever to the original hat.

Before telling *The Dead Baby*, the child had read Tennyson's *May Queen* a great many times, and quite as many times two little poems by Eugene Field, entitled *Little Boy Blue* and *Sometime*.

On the particular morning on which *The Dead Baby* was written, she had read them all and talked about them to her mother, commenting on their sadness. At last she announced that she had a yet sadder piece in her mind, and then recited her own little poem.

The elements of *The May Queen* are, death, a grave, flowers, grief. In the poems by Field, the same elements of death, a grave, and grief, are found, and the time—night—and the baby are emphasized.

From a study of these two productions, would it not seem that a child's imagination is fed entirely by the incidents of his environment? That instead of creating new elements, he merely builds his past experiences into new relations? And that the element in them that has led us to think them occult and beyond our understanding, is the tendency toward personification that is characteristic of all primitive minds?

BIBLIOGRAPHY OF THE PUBLISHED WORK OF DR. G. STANLEY HALL.¹

EARL BARNES.

Dr. G. Stanley Hall, President of Clark University, is the acknowledged leader in the lines of psychological work represented in these *Studies*; and those who have prepared these articles on child-study have all directly or indirectly drawn inspiration and suggestion from him.

He introduced experimental psychology into this country, and insisted on the necessity of studying children by inductive methods at a time when, from the whole National Educational Association, he could gather but a dozen hearers. Last summer, before the same Association at Buffalo, he spoke to nearly five thousand people on the subject of child-study. It is not too much to say that he has been the leader in our country in developing a sentiment that has made the direct inductive study of human nature one of the foremost fields of intellectual activity. He has exerted this influence through his students, his public lectures, and his writings, especially through the *American Journal of Psychology* and the *Pedagogical Seminary*, both of which he established and maintained at his own expense, until he had a body of readers prepared to appreciate and support them. He has been an inspiring, suggesting, and directing center, and his published work is so marked by his personal qualities, that it is especially valuable for students of education to-day, when educational theories and institutions are both being re-formed. At the same time, some of his writings are so scattered as to be comparatively inaccessible and unknown. The following list has been prepared for the use of readers who wish to bring this material together. In arranging the titles, we have placed them chronologically, as they thus throw a good deal of light upon the development of this new movement.

¹ Louis N. Wilson and Frederick L. Burk have given me so much aid in the preparation of this list, that the work is as much theirs as mine.

1867.

John Stuart Mill. The Williams Quarterly, Williamstown, Mass.
August, 1867.

1873.

Digest of Dorner's Theology. Presbyterian Review. January,
1873. pp. 60-93.

1874.

Hegel as the National Philosopher of Germany. (Translated from
the German of Dr. Carl Rosenkranz.) Gray, Baker & Co.,
St. Louis. 1874.

1878.

Hegel: His Followers and Critics. Jour. of Spec. Philos. 1878.
Vol. XII, pp. 93-103.

On the Perception of Color. Proc. Am. Acad. of Arts and Sciences.
March, 1878. Vol. III, p. 402.

The Muscular Perception of Space. Mind. October, 1878.
Vol. III, pp. 433-450.

The Philosophy of the Future. The Nation. November 7, 1878.
Vol. XXVII, pp. 283-284.

1879.

Philosophy in the United States. Mind. January, 1879. Vol. IV,
pp. 89-105.

Ueber die Abhängigkeit der Reactionszeiten vom Ort des Reizes.
With J. v. Kries. Archiv f. Physiol. (Du Bois-Reymond.)
Suppl. Band. 1879. pp. 1-10.

Die willkürliche Muskelaction. With Hugo Kronecker. Archiv f.
Physiol. (Du Bois-Reymond.) Suppl. Band. 1879. pp. 11-47.

Laura Bridgman. Mind. April, 1879. Vol. IV. pp. 149-172.

Philosophy in the United States. Pop. Sci. Mo., Suppl. No. 1.
1879. p. 57.

1881.

Recent Researches in Hypnotism. Mind. January, 1881. Vol. VI,
pp. 98-104.

Aspects of German Culture. James R. Osgood & Co., Boston.
1881. pp. 320.

CONTENTS.

Religious Opinion—The Vivisection Question—The Passion Play—Some Recent Pessimistic Theories—The New Cultus War—Ferdinand Lassalle—The Graphic Method—The Leipzig "Messe"—A Pomeranian Watering Place—Emperor Wilhelm's Return—Hermann Lotze—Is *Æsthetics* a Science?—The German Science—Are the German Universities Declining?—Fowler's Locke and German Psychology—Spiritualism in Germany—Recent Studies in Hypnotism—Popular Science in Germany—A Note on Hegel, His Followers and Critics—Hartmann's New System of Pessimistic Ethics—The Latest German Philosophical Literature—Democritus and Heraclitus—The Muscular Perception of Space—Laura Bridgman—The Perception of Color—A Note on the Present Condition of Philosophy—First Impressions on Return from Germany.

1882.

Chairs of Pedagogy in Our Higher Institutions of Learning.
N. E. A. March, 1882. U. S. Bur. of Ed. Circular of Information, No. 2. 1882. pp. 35-44.

Contents of Children's Minds on Entering School. Princeton Review. May, 1882. p. 139. Ped. Sem. June, 1891. Vol. I, pp. 139-173. Issued in pamphlet form by E. L. Kellogg & Co., New York. 1893. pp. 56.

Optical Illusions of Motion. With Dr. H. P. Bowditch. Jour. of Physiology. August, 1882, Vol. III, pp. 297-307.

The Education of the Will. Princeton Review. November, 1882. pp. 306-325.

1883.

Moral and Religious Training of Children. Princeton Review. January, 1883. Vol. IX, p. 26.

Methods of Teaching History. (Edited.) Ginn, Heath & Co., Boston. 1883. pp. xii-296.

Education and Theology. The Nation. July 26, 1883. Vol. XXXVII, pp. 81-82.

The Study of Children. Privately printed. N. Somerville, Mass. 1883. pp. 13.

The New Psychology. Andover Review. 1883.

1884.

Bilateral Asymmetry of Function. With E. M. Hartwell. Mind. January, 1884. Vol. IX, pp. 93-109.

1885.

New Departures in Education. N. Am. Review. February, 1885.
Vol. CXL. pp. 144-152.

The New Psychology. Andover Review. March and May, 1885.
Vol. III, pp. 120-135; 239-248. Opening lecture, Johns
Hopkins Univ., October, 1884.

Experimental Psychology. Mind. April, 1885. Vol. X, pp.
245-249.

Overpressure in Schools. The Nation. October 22, 1885. Vol.
XLI, pp. 338-339.

Motor Sensations on the Skin. With Dr. H. H. Donaldson. Mind.
October, 1885. Vol. X, pp. 557-572.

1886.

Studies of Rhythm. With Joseph Jastrow. Mind. January, 1886.
Vol. XI, pp. 55-62.

Hints toward a Select and Descriptive Bibliography of Education.
With John M. Mansfield. D. C. Heath & Co., Boston. 1886.
pp. 309.

1887.

Psychical Research. Am. Jour. of Psy. November, 1887. Vol. I,
pp. 128-146.

Dermal Sensitiveness to Gradual Pressure-Changes. With Y.
Motora. Am. Jour. of Psy. November, 1887. Vol. I, pp.
72-98.

The American Journal of Psychology. (Founder and editor.)
Vols. I-VIII. 1887-1897. J. H. Orpha, Publisher, Wor-
cester, Mass.

1888.

The Story of a Sand Pile. Scribner's Magazine. June, 1888.
Vol. III, pp. 690-696.

Introduction to American Edition of Preyer's Senses and Will.
(Translated by H. W. Brown.) New York. 1888.

1889.

*Address Delivered at the Opening of Clark University, Worcester,
Mass., October 2, 1889.* Printed by the University.

1890.

A Sketch of the History of Reflex Action. Am. Jour. of Psy. January, 1890. Vol. III. pp. 71-86.

How to Teach Reading, and What to Read. D. C. Heath & Co., Boston. 1890. pp. 40.

Children's Lies. Am. Jour. of Psy. January, 1890. Vol. III, pp. 59-70. Reprinted in Ped. Sem. June, 1891. Vol. I, pp. 211-218.

The Training of Teachers. Forum. September, 1890. Vol. X, pp. 11-22.

First Annual Report to the Board of Trustees of Clark University, Worcester, Mass., October 4, 1890. pp. 53.

1891.

University Study of Philosophy. Discussion. Regents' Rep. Univ. State of N. Y. 1891. Vol. CV, pp. 335-338.

Boy Life in a Massachusetts Country Town a Quarter of a Century Ago. Proc. Am. Antiq. Soc. 1891. Vol. VII. pp. 107-128.

The Pedagogical Seminary: An International Record of Educational Literature, Institutions, and Progress. (Founder and editor.) Vols. I-IV. 1891-1897. J. H. Orpha, Publisher, Worcester, Mass.

Educational Reforms. Ped. Sem. Vol. I, pp. 1-12. Appeared also as *Riforme Pedagogiche* in *Il Risveglio Educativo*. Aprile 13-16, 1892. Anno VIII, pp. 207-208; 210-211.

Contemporary Psychologists. I—Edward Zeller. Am. Jour. of Psy. April, 1891. Vol. IV, pp. 156-175.

Enseignement des Sciences. Revue Scientifique. April 4, 1891. Vol. XLVII, pp. 430-433.

Notes on the Study of Infants. Ped. Sem. June, 1891. Vol. I, pp. 127-138.

The Moral and Religious Training of Children and Adolescents. Ped. Sem. June, 1891. Vol. I, pp. 196-210.

Second Annual Report to the Board of Trustees of Clark University, Worcester, Mass., September 29, 1891. pp. 56.

The New Movement in Education. An address delivered before the School of Pedagogy of the City of New York, December 29, 1891. Published by the Women's Advisory Committee, New York. 1891. pp. 20.

1892.

Outlook in Education. Academy, Syracuse, N. Y. January, 1892. Vol. VI, pp. 543-562.

Health of School Children as Affected by School Buildings. Report of Proceedings of the Department of Superintendence, held in Brooklyn, N. Y., February, 1892.

Moral Education and Will Training. Ped. Sem. June, 1892. Vol. II, pp. 72-89.

Higher Education. Academy, Syracuse, N. Y. July, 1892. Vol. VII.

Child-Study as a Basis for Psychology and Psychological Teaching. Report of Commissioner of Education, 1892-1893. Vol. I, pp. 357-358; 717-718.

1893.

Reaction-Time and Attention in the Hypnotic State. Mind. April, 1893. Vol. VIII, pp. 170-182.

Third Annual Report to the Board of Trustees of Clark University, Worcester, Mass., April, 1893. pp. 168.

Psychological Progress. The Liberal Club, Buffalo, N. Y. November 16, 1893.

Child-Study: The Basis of Exact Education. Forum. December, 1893. Vol. XVI, pp. 429-441.

1894.

American Universities and the Training of Teachers. Forum. April, 1894. Vol. XVII, pp. 148-159.

Universities and the Training of Professors. Forum. May, 1894. Vol. XVII, pp. 297-309.

Scholarships, Fellowships, and the Training of Professors. Forum. June, 1894. Vol. XVII, pp. 443-454.

Research the Vital Spirit of Teaching. Forum. July, 1894. Vol. XVII, pp. 558-570.

Child-Study in Summer Schools. Regents' Bulletin, University of the State of New York. No. 29. July, 1894. Albany, N. Y. pp. 333.

Research the Vital Spirit of Teaching. Forum. July, 1894. Vol. XVII, pp. 558-570.

The New Psychology as a Basis of Education. Forum. August, 1894. Vol. XVII, pp. 710-720.

Address at the Dedication of the Haston Free Public Library Building. N. Brookfield, Mass., September 20, 1894.

From the Reports of the Plato Club. H. A. Aikins. Atlantic Monthly. September and October, 1894. Vol. LXXIV, pp. 359-368; 470-480. A description of Dr. Hall's Seminary discussions and methods.

On the History of American College Text Books and Teaching in Logic, Ethics, Psychology, and Allied Subjects. Proc. Am. Antiq. Soc. 1894. Vol. IX, pp. 137-174.

Child-Study. Proc. N. E. A. 1894. pp. 173-179.

Remarks on Rhythm in Education. Proc. N. E. A. 1894. pp. 84-85.

Topical Syllabi for 1894-1895. These were one- or two-page leaflets, prepared by Dr. Hall, and privately printed at Worcester, Mass. They covered—I. Anger; II. Dolls; III. Crying and Laughing; IV. Toys and Playthings; V. Folk-Lore Among Children; VI. Early Forms of Vocal Expression; VII. The Early Sense of Self; VIII. Fears in Childhood and Youth; IX. Some Common Traits and Habits; X. Some Common Automatism, Nerve Signs, etc.; XI. Feeling for Objects of Inanimate Nature; XII. Feeling for Objects of Animate Nature; XIII. Children's Appetites and Foods; XIV. Affection and its Opposite States in Children; XV. Moral and Religious Experiences.

1895.

Laboratory of the McLean Hospital, Somerville, Mass. Am. Jour. of Insanity: January, 1895. Vol. LI, pp. 358-364.

Psychic Research. Am. Jour. of Psy. October, 1895. Vol. VII, pp. 135-142.

Introduction to the Psychology of Childhood. By Frederick Tracy. Boston. 1895.

Topical Syllabi for 1895-1896. These leaflets covered from one to four pages, and were prepared by Dr. Hall with some student, as follows:—I. Peculiar and Exceptional Children, with E. W. Bohannon; II. Moral Defects and Perversions, with G. E. Dawson; III. The Beginnings of Reading and Writing, with Dr. H. T. Lukens; IV. Thoughts and Feelings about Old Age, Disease, and Death, with C. A. Scott; V. Moral Education, with N. P. Avery; VI. Studies of School Reading Matter, with J. C. Shaw; VII. Courses of Study in Elementary Grammar and High Schools, with T. R. Crosswell; VIII. Early Musical Manifestations, with Florence Marsh; IX. Fancy, Imagination, Reverie, with E. H. Lindley; X. Tickling, Fun, Wit, Humor, Laughing, with Dr. Arthur Allin; XI. Suggestion and Imitation, with M. H. Small; XII. Religious Experience, with E. E. Starbuck; XIII. Kindergarten, with Miss Anna E. Bryan and Miss Lucy Wheelock; XIV. Habits, Instincts, etc., in Animals, with Dr. R. R. Gurley; XV. Number and Mathematics, with D. E. Phillips; XVI. The Only Child in the Family, with E. W. Bohannon.

1896.

The Case of the Public Schools. Atlantic Monthly. March, 1896. Vol. LXXVII, pp. 402-413.

Generalizations and Directions for Child-Study. The Northwestern Journal of Education. July, 1896. Vol. VII, p. 8.

Psychological Education. Am. Jour. of Insanity. October, 1896. Vol. LIII, pp. 228-241.

Address at Mount Holyoke College, Founder's Day, November 5, 1896. The Mount Holyoke, S. Hadley, Mass. November, 1896. Vol. VI, pp. 64-71.

A Study of Dolls. With A. C. Ellis. Ped. Sem. December, 1896. Vol. IV, pp. 129-175.

Nature Study. Proc. N. E. A. 1896.

Topical Syllabi for 1896-1897. These were two- or three-page leaflets, and were prepared by Dr. Hall with some student, as follows:—I. Degrees of Certainty and Conviction in Children,

with Maurice H. Small; II. Sabbath, and Worship in General, with J. P. Hylan; III. Migrations, Tramps, Truancy, Running Away, etc., *vs.* Love of Home, with L. W. Kline; IV. Adolescence, and its Phenomena in Body and Mind, with E. G. Lancaster; V. Examinations and Recitations, with John C. Shaw; VI. Stillness, Solitude, Restlessness, with H. S. Curtis; VII. The Psychology of Health and Disease, with Henry H. Goddard; VIII. Spontaneously Invented Toys and Amusements, with T. R. Crosswell; IX. Hymns and Sacred Music, with Rev. T. R. Peede; X. Puzzles and their Psychology, with Ernest H. Lindley; XI. The Sermon, with Rev. Alva R. Scott; XII. Special Traits as Indices of Character and as Mediating Likes and Dislikes, with E. W. Bohannon.

1897.

A Study of Fears. Am. Jour. of Psy. January, 1897. Vol. VIII, pp. 147-249.

THE INTELLECTUAL LEADERSHIP OF GERMANY IN THE NINETEENTH CENTURY.

MARY SHELDON BARNES, ASSISTED BY A STANFORD *SEMINAR*.

The following article is presented, not only on account of its subject-matter, but also as illustrative of two methods in history, namely, the *seminar* method and the method of collated biography. Each of these methods is, in our judgment, destined to be far more widely employed than at present.

A *seminar* course on the intellectual leadership of Germany in the present century was offered in the fall of 1896 to those students who had the requisite maturity, as well as a general knowledge of the history of the nineteenth century, and a reading knowledge of German. The little group of five¹ who accepted the course met me once a week for a two-hour session, in which we worked together on our subject, sometimes investigating, sometimes reporting the results of outside reading, and sometimes discussing points of fact or method. The first thing we did was to go into the library and find what books were available for our work. These books were divided among us for reading and note-taking, according to our individual interests; thus, one took German art; another, German science; another, German literature. We then discussed our problem, outlined the points which were to be developed, and agreed on a common plan of taking notes. As time went on, our plans were more or less modified by the nature of our material, and by the time at our disposal. Toward the end of the semester, the results of the work were gathered up in a series of special reports on the individual topics at first selected. After these were all read and discussed, each member wrote out a general view of the whole subject as it had revealed itself to him through his own special study and the common discussions. The points presented in these final papers, and accepted by common consent, are presented in

¹ Florence Cushman, Belle Fielder, Sadie Simons, Ralph Wardall, Mrs. A. P. Zachokke.

the following article, which is really the product of our common labors, although put into its present shape by myself, as leader of the *seminar*.

The second form of method illustrated by this article is the collation of biographies, a statistical form of investigation, too much neglected in history, but capable of resolving with certainty many questions, when interpreted in the light of events and conditions. It is a quantitative method, which can be used with advantage in giving accuracy and point to generalities.

Germany, in the days of Frederick the Great, had no intellectual leadership in Europe of any sort; worse than that, she was dull and barbaric, her products notoriously inferior and ugly; nor had she dominant names, either in art, science, or letters. Germany in the present century holds an intellectual leadership only to be compared with that of ancient Athens; considerably more than half the noted names of the present century in science, history, and philosophy, are hers; and the roll in art and letters is neither short nor poor. The organization of her army is the model which every military state strives to equal; the system and the method of her education have profoundly modified the schools of America, France, Italy, and every modern state; her professors and the graduates of her universities are found at every great seat of learning; the thousands of students in her own universities are augmented by hundreds of students from abroad; from Kant to Lotze, German philosophy has dominated the thought of Europe; the German laboratory and the German *seminar* are making the tour of the world; no scholar can reach the arcana of his science without reading books that Germans have made.

The fact is tremendous and patent: Germany leads the nineteenth century in the mass and acumen of her learning, in the excellence of her intellectual products. How it has come to pass is a question most important for the student of culture to answer. The intellectual life, like any other, is measured by its products; and its products are scholars and books, inventions and methods. Our first work, then, was to get at these facts: Who are the great Germans of the century? and, What books or inventions have they produced? If we had these facts, we could easily discover further

where and how these Germans were trained, and to what influences they were subjected; and, by collating these data, we could arrive at some general view of the causes which have led to the production of these men and works. Two biographical lists were made, one for the eighteenth, and one for the nineteenth century. In order to make these lists impartial, we used Nichol's Tables as our first basis, introducing every name he gave; to these names were added such names as a collation and discussion of our various special readings proved to be important, using the names given by Honegger in his *Culturgeschichte* as a check and guide. No name was used except by the consensus of all our judgments.

LIST OF GERMANS, NOTED INTELLECTUALLY, WHO FLOURISHED 1815-1871.

- Arndt.** 1769-1860. Prussia. Studied at Königsberg. Patriotic poet and political writer in behalf of German nationality; professor of history at Bonn; suspended from chair 1819-1840 for insisting on constitutional reform; in the National Assembly of 1848.
- Auerbach.** 1812-1882. Württemberg. Studied at Tübingen, Munich, Heidelberg. Jewish novelist and poet; imprisoned in 1836 for joining the Burschenschaft; village stories.
- Baur.** 1792-1860. Württemberg. Founder of Tübingen school of biblical criticism; professor at Tübingen; theological works.
- Bessel.** 1784-1846. Prussia. Astronomer; director of Königsberg Observatory.
- Bopp.** 1791-1867. Prussia. Put comparative philology on scientific basis, professor at Berlin; comparative grammar of Sanskrit, Zend, Armenian; Greek, etc.
- Boeckh.** 1785-1867. Baden. Berlin professor of Greek antiquities and philology.
- Bunsen, Baron von.** 1791-1860. Prussia. Prussian Minister at Rome and London; Egyptologist and ecclesiastical historian; Conservative-Liberal in politics.
- Bunsen, R. W.** 1811—. Göttingen. Professor of chemistry at Heidelberg; inventor of Bunsen burner, etc.; spectrum analysis.
- Chamisso.** 1781-1838. French birth and Prussian residence. Poet and botanist; popular songs, ballads, romances.
- Cornelius.** 1783-1867. Prussia. Restoration of fresco painting; Munich, Berlin; Greek, German, and biblical subjects; leader of Düsseldorf Academy.

- Dahn.** 1834—. Hamburg. Studied at Munich and Berlin; historian, poet and dramatist; professor at Munich, Königsberg, etc.; novels from early German life.
- Droste-Hülshoff, Annette E. von.** 1797-1848. Prussia. Poet and story-writer; subjects from village life.
- Ebers.** 1837—. Prussia. Egyptologist and novelist; professor at Jena and Leipzig; historical tales of Egyptian life.
- Ehrenberg.** 1795-1876. Prussian naturalist; work on infusoria.
- Encke.** 1791-1865. Hamburg. Astronomer at Berlin Observatory; investigated comets.
- Ewald.** 1803-1875. Prussia. Göttingen and Tübingen professor; orientalist and biblical critic; inclined toward rationalism.
- Freiligrath.** 1810-1876. Lippe. Patriotic poet of the Liberal party; left Germany for London on account of his Liberal opinions.
- Freytag.** 1816-1896. Prussia. Historical novelist; subjects connected with German life and history; professor at Breslau.
- Fresenius.** 1818—. Prussia. Noted chemist and chemical author; founded chemical laboratory at Wiesbaden, in Prussia.
- Froebel.** 1782-1852. Schwarzburg-Rudolstadt. Studied at Jena, Göttingen, Berlin; soldier in War of Liberation; founder of kindergartens.
- Gervinus.** 1805-1871. Hesse. Göttingen and Heidelberg professor of history and literature; removed from chair in 1837 because he protested against the abolition of the Constitution of Hanover; Liberal leader in 1848.
- Grimm, Jakob.** 1785-1863. } Prussia. German philologists; Göttingen
Grimm, Wilhelm. 1786-1859. } and Berlin professors; deprived of Göttingen chairs in 1837 for Liberal principles in politics.
- Gutzkow.** 1811-1878. Prussia. Studied at Berlin; dramatist and novelist; imprisoned for published religious views; advanced Liberal in politics.
- Haeckel.** 1834—. Prussia. Noted naturalist, advocating biological evolution; professor at Jena.
- Hahn-Hahn, Countess Ida.** 1805-1880. Mecklenburg-Schwerin. Poems and romances.
- Heine.** 1797-1856. Prussia. Studied at Bonn, Berlin, and Göttingen; romantic and lyric poet and prose writer; revolutionary spirit; leader of "Young Germany."
- Helmholtz.** 1821—. Prussia. Physiologist and physicist; professor at Königsberg, Bonn, Heidelberg, Berlin; noted for discoveries in optics and acoustics; inventor of ophthalmoscope.
- Herwegh.** 1817-1875. Württemberg. Political poems in favor of advanced Liberalism; leader in 1848 in Baden.
- Herbart.** 1776-1841. Oldenburg. Göttingen professor of philosophy and psychology; founder of a pedagogical philosophy very important to-day.

- Humboldt, Alexander von.** 1769-1859. Prussia. Studied at Frankfort and Göttingen; scientist and author; traveled in Central and South America and Asia; author of *Kosmos*, 1845-1858.
- Humboldt, Wilhelm von.** 1767-1835. Prussia. Studied at Frankfort and Göttingen; philologist and statesman.
- Kaulbach.** 1805-1874. Waldeck. Historical painter; patronized by kings of Bavaria and Prussia.
- Klenze, Leo von.** 1784-1864. Prussia. Architect, building for King of Bavaria, Walhalla, etc.; Greek forms.
- Lamalle.** 1825-1864. Prussia. Founder of Social Democracy in Germany.
- Lepsius.** 1810-1884. Prussia. Egyptologist and philologist; led Prussian expedition to Egypt in 1842-1846; *Monuments of Egypt and Ethiopia*, 1849-1859, and other works in Egyptology.
- Liebig.** 1803-1873. Hesse. Professor at Giessen; founded there first model laboratory of Germany; founder of organic chemistry in practical applications.
- List.** 1789-1846. Württemberg. Imprisoned or exiled from 1822 onward; author of *New System of Political Economy*.
- Martius.** 1794-1868. Erlangen. Botanist and traveler; professor at Munich; works on botany, zoölogy, and ethnology, brought out at expense of Bavarian government.
- Marlitt, Elizabeth.** 1825-1887. Thuringia. Novelist, choosing subjects from life around her.
- Marx.** 1818-1883. Prussia. Social economist and socialist; studied at Bonn and Berlin; exiled by Prussia; lived in Paris, Brussels, and London; *Das Kapital*; controlling spirit of *International*, 1864-1872.
- Menzel.** 1815—. Prussia. Historical and genre painter, using mostly Prussian subjects of time of Frederick the Great.
- Meyerbeer.** 1791-1864. Prussia. Pianist and composer; made director of music by King of Prussia.
- Mendelssohn.** 1809-1847. Hamburg. Musician and composer; director at Leipsic.
- Mundt (Mühlbach, Louise).** 1814-1873. Prussia. Historical novelist; subjects from German and French history.
- Müller, Max.** 1823—. Anhalt. Oxford professor; orientalist; Hindoo languages and literatures.
- Müller, Johann.** 1801-1858. Prussia. Berlin professor; physiology and zoölogy.
- Müller, Karl Otfried.** 1797-1840. Prussia. Göttingen professor; Greek archæology and art.
- Neander.** 1789-1850. Göttingen. Church historian and theologian; Berlin professor; author of *General History of the Christian Religion and Church*, 1825-1852; critical exegesis.

- Nitsch.** 1787-1868. Saxony. Theological writer; one of the founders of the "mediation theology"; professor at Berlin.
- Oken.** 1779-1851. Württemberg. Naturalist; Jena and Zurich professor.
- Overbeck.** 1789-1869. Lubeck. Painter of scriptural subjects; 1810, founded pre-Raphaelite Brotherhood.
- Paulus.** 1761-1851. Württemberg. Exegetical theologian; leading exponent of rationalism; professor at Jena and Heidelberg.
- Poeppig.** 1798-1868. Saxony. Naturalist and explorer; Leipsic professor of zoölogy; author of works on botany.
- Ranke.** 1795-1880. Thuringia. Berlin professor; work in general modern history; founder of *seminar* system of teaching history.
- Rauch.** 1777-1857. Waldeck. Sculptor; mausoleum of Queen Louise of Prussia, statue of Frederick the Great, at Berlin, and other historical and portrait statues of noted Germans.
- Rau.** 1792-1870. Bavaria. Political economist; considered founder of this science in Germany; professor at Heidelberg.
- Reuter.** 1810-1874. Mecklenburg-Schwerin. German dialect poet; arrested as a member of the Burschenschaft in 1832.
- Richter, Gustav.** 1823-1884. Prussia. Painter of portraits and historical pictures and genre; village scenes and children, favorites.
- Riehl.** 1823—. Rhineland. Novelist and historical writer; professor of culture-history at Munich; historical novels and works.
- Ritter.** 1779-1859. Quedlinburg. Professor of history at Berlin; geographer; wrote on relations of history and geography.
- Rückert.** 1788-1866. Schweinfurth. Poet and Orientalist; professor at Erlangen and Berlin; wrote on German and Oriental subjects.
- Savigny.** 1778-1861. Frankfort-on-the-Main. Jurist and politician; one of the founders of the historical school of jurisprudence; Berlin professor; minister for the revision of the legislation in 1842-1848.
- Schadow, Johann G.** 1764-1850. Prussia. Founder of modern Berlin school of sculpture; portrait statues of noted Germans.
- Schadow, Wilhelm F.** 1789-1862. Prussia. Painter, and founder of Düsseldorf school, 1826, etc.
- Schleiermacher.** 1768-1834. Prussia. Philosopher, theologian, and patriot; professor of theology at Berlin.
- Schelling.** 1775-1854. Württemberg. Philosophical author; professor at Jena, Würzburg, and Berlin; director of Academy of Sciences at Munich.
- Scheffel.** 1826-1886. Baden. Studied at Heidelberg, Munich, Berlin; poet and novelist; Bavarian Circle; wrote from German history and life.
- Schleiden.** 1804-1881. Hamburg. Noted botanist; professor at Jena and Dorpat (in Russia).

- Schlegel, August Wilhelm von.** 1767-1845. } Hanover. Critics, jour-
Schlegel, Karl Wilhelm Friedrich von. 1772-1829. } nalists, poets, and Ori-
 entalists; studied at Göttingen and Leipsic; founders of the *Athenaeum*,
 organ of the romantic school.
- Schopenhauer.** 1788-1860. Dantzig. Studied at Göttingen, Berlin, Jena; pessimistic philosopher.
- Schumann.** 1810-1856. Saxony. Composer and musical critic; of the romantic school; founded a musical journal in 1834.
- Simrock.** 1802-1876. Prussia. Poet, translator; professor of old German literature at Bonn; translated *Nibelungen-Lied* and other old German poems; wrote on old German themes.
- Schwanthaler.** 1802-1848. Munich. Artist and sculptor for King of Bavaria; colossal bronze statue of Bavaria; Greek and German subjects.
- Spohr.** 1784-1859. Brunswick. Eminent musician and composer; chapel-master at Vienna and at Hesse-Cassel, under royal and ducal patronage.
- Strauss.** 1808-1874. Würtemberg. Zurich professor; driven away by the people of Zurich for his rationalism; life of Jesus critically treated, in 1835; denies miracles.
- Struve.** 1793-1864. Prussia. Astronomer; director of Russian observatories; double-stars specialty.
- Sybel.** 1817-1895. Prussia. Historian and statesman; professor at Marburg and Berlin; German and modern history.
- Tieck.** 1773-1853. Prussia. Studied at Halle, Göttingen, Erlangen; poet and critic; popular folk-tales; helped direct Royal Theater at Dresden; romantic school.
- Tholuck.** 1799-1877. Prussia. Berlin and Halle professor; theologian and pulpit orator; fights rationalism by spiritual teaching.
- Uhland.** 1787-1862. Würtemberg. Tübingen professor of German language and literature; patriotic poet; advocate of constitutional principles.
- Virchow.** 1821— . Prussia. Anatomist, physiologist, and anthropologist; founder of cellular pathology; professor at Würzburg and Berlin; active in German Liberal party.
- Wagner.** 1813-1883. Leipsic. Operatic composer and poet; studied in Leipsic; used German subjects; founder of German opera.

On analyzing this list, we find that of the total of eighty-four names selected, fifty-five are connected with Prussia, either by birth, training, or work; nine with Würtemberg; four with Bavaria; four with Hanover; while sixteen are scattered among the other states. Even remembering that Prussian territory has constantly enlarged, until it now includes half of Germany, her proportion of

names still remains decidedly in the lead. Classifying according to work or interest, we find that the men fall into two great groups,—those whose interests are æsthetic, and those whose interests are purely intellectual; the former group includes sixteen poets, eleven artists, eight novelists, and four musicians, a total of forty; the second group includes twenty-one scientists, eighteen philologists, seventeen historians, and twelve philosophers, a total of sixty-eight. Examining these two groups still further, we find that the æsthetic group largely finds its support and encouragement in courts, and, with the exception of Wagner, its members are not connected with the political life of the state. The purely intellectual group, on the other hand, includes fifty-eight men trained in the universities, forty-four of whom are university professors, and twenty-four of whom are connected with politics.

Prussia, then, on this nearer view, appears as the leader of Germany in her attraction of intellectual men; the universities appear as the leaders of Germany in their training; in the universities, the studies which lead are the physical sciences, philology, history, and philosophy.

If we compare this list with a similar one for the eighteenth century, we find that, in the earlier age, Prussia was but notable among a number of states, like Hanover, Weimar, Austria, which pushed her hard for intellectual leadership. The comparison also reveals the fact that courts like that of Vienna, voluntary societies like the *Hainbund*, agitating individuals like Lessing, are quite as often centers of intellectual impulse as the universities, although Königsberg and Göttingen already have notable power. Comparing the two centuries in regard to intellectual interest, we find that they share the interest in philosophy, but that, philosophy aside, the great German names of the eighteenth century—Lessing, Schiller, Herder, Wieland, are on the æsthetic rather than the scientific and practical side of the intellect, while the greatest names of the nineteenth century are those of men like Humboldt, Bunsen, Helmholtz, Virchow. Goethe stands between, a man whose keenest interest leans now to science, now to art.

What has changed the complexion of the time from that age to this, and given Prussia decided lead over the other states of Germany, the universities lead over courts, societies, and individuals, and the scientific lead over the æsthetic intellect?

To interpret the facts our statistics reveal, we must turn to the historic events and movements of the time, where we come face to face with the French Revolution and the Napoleonic wars, breaking the two centuries apart from each other all over Europe. These epoch-making movements give us a general background of aristocracy and privilege for one century, and democracy and equality for the other. These general causes go far to account for the phenomena we have noticed, namely, the decline of power in courts, societies, and individuals, the rise of power in the universities, the excess of scientific over æsthetic interests and products. It accounts even to a large extent for the leadership of Prussia, for Prussia, from the very first, attached herself with life and death grip to the new ideas and forces destined to dominate the men of the nineteenth century. Her downfall before Napoleon was destined to be fatal, unless she could quickly vitalize her people with patriotic enthusiasm and knowledge. Hence, the immediate efforts of Stein and his circle to give freedom to labor and movement by the Emancipating Edict, to quicken higher education by the foundation of the University of Berlin, to vitalize secondary education by the methods of Pestalozzi, to make it accessible and uniform by public schools, to inspire the army by making it the defence of the people by the people, and by adopting in every direction the motto of Napoleon, "Careers are open to talent." All these efforts resulted in the War of Liberation, but did not end there; they gave birth to a new people and a modern state.

In Prussia, other causes reinforced this great common movement of the age; for she was the land of Frederick the Great, and even in his day had received an impulse toward freedom of thought not to be found elsewhere in Europe. So, for nearly half a century, the skeptical, critical spirit of France, embodied in Voltaire and Rousseau, had been fermenting in Prussia, ruining old conventions by new ideas. In Prussia, too, lay Königsberg, and at Königsberg Kant had taught for half a century, putting the impress of manly, courageous thought on all his appreciative students. Nor must it be forgotten that Prussia, since 1800, has been served by Stein, Bismarck, Blücher, and Von Moltke.

So, from the start of the century, Prussia has come to be the maker of Germany, changing the state of the days of Frederick the Great, dismembered, jarring, and helpless, into the foremost power

of Europe. This political and military glory has acted as a stimulus in every field, and her sons have had the courage which a great state gives her children,—the courage to think and speak as masters.

Let us examine the universities more particularly. Historically, we shall find that they have had an intimate connection with politics. Stein and Bismarck were alumni of Göttingen; and at Göttingen, in the last century, the idea of German nationality may almost be said to have been discovered by the ardent students who crowned Klopstock and burned Wieland in solemn effigy. We have seen that Berlin was founded as a measure of statecraft. The army of the War of Liberation was leavened throughout by the students of the universities; Fichte kept sword and spear always ready for himself and his son, should the need come to serve. At Jena, in 1813, the "Holy Alliance" of the *Burschenschaften* was formed by the deputies of fourteen universities; and Arndt tells us with what solemn enthusiasm hundreds of students swore "allegiance to the old holy virtues and knightly customs" of the fatherland. The *Wartburgsfest*, the exile of "The Göttingen Seven," the Carlsbad Decrees, the Parliaments of 1848, all attest the sincerity and the influence of the universities in the making of the modern and powerful German Empire. In a time when United Germany could only sit by the fire and dream, they kept her hearth-fires burning in the air of free thought and youthful enthusiasm. This cause alone might determine the leadership of any group of young men, inspiring them, as it did, to lives devoted to a noble aim; but in the universities this cause, which gave a vital impulse to character, was reinforced by another, which gave a vital impulse to intellect. This is that characteristic of the German university which permits the greatest *Lehrfreiheit* and *Lernfreiheit*; which gives the largest possible play to intellectual genius and energy, by giving the professor liberty to lecture in his own chosen specialty, and the student liberty to attend the lectures which he needs for his own individual development, and which even allows him to move from university to university, according to his plans.

How has it happened, however, that this leadership moves chiefly in the directions of philosophy, philology, history, and natural science? If we look to see what these subjects have in common, we encounter a method invented in the last part of the eighteenth century, and applied by masters in each of these sub-

jects: to philosophy by Kant, to philology by Wolff, to history by Niebuhr and Ranke, to science by Humboldt and Liebig. This method is the critical and comparative method of research, which made the rational philosophy, which has created modern philology, history, and physical science. This critical method, dealing with realities and distrusting authority, allied itself in closest union with the Pestalozzian methods of the lower schools, and with the democratic aims of the century.

A still closer examination of details than we have been able to make would reveal new causes and connections; but even this rough preliminary study justifies us in stating positively that the leading causes of the German intellectual leadership of the nineteenth century have been:—

1. The general democratic background of the period.
2. The impulses given to Prussia by France and England during the free-thinking period of Frederick the Great.
3. The determined and conscious effort of Stein and his group to create efficient and highly trained Prussians as a resistance to Napoleon.
4. The free life and thought of the universities turned enthusiastically toward the splendid aim of developing the individual national life of Germany.
5. The political leadership of Prussia.
6. The critical and comparative method.

As we look over these means, we ask, How far are they to be commanded in the United States? We can furnish free thought, free universities, full of youth and energy, a great state, the critical method; but we lack that spiritual concentration and power given by such an ideal aim as united Germany, and what can replace it? What can replace it in Germany itself? It is the most potent force in life, and wherever found, leads to the future. Surely, great and splendid aims are yet left to which young men of the highest talent and training may find it worth their while to devote their lives. The problems of great cities, of education, of vice and poverty,—civilization has these to grapple with within its own circle; and, beyond that, with famines in India, with awakening China, with darkest Africa, and disorderly America. Leadership in statecraft, in empire, in well-ordered society, waits for the land and the men who can win it, and that leadership will spring, as it did in Germany, from conditions of freedom, youth, and concentrated, enthusiastic faith.

THE HISTORY OF EDUCATION.

GENERAL CONCLUSIONS.

EARL BARNES.

Three kinds of knowledge seem to me necessary for the teacher who is to be thoroughly equipped for work. In the first place, he should have a most intimate, and as far as possible, exhaustive acquaintance with the stuff with which he is going to work. First, last, and all the time this stuff is children, or to put it more broadly, human beings. Greek, mathematics, school-houses, or courses of study exist only for the sake of the human beings they are to affect. So, in the curriculum for a teacher, I should place as first and all-important the study of children, or to put it more broadly, the study of the natural history of human beings. Nor is it sufficient for the teacher to study the child only during the period with which he especially deals. A college professor should study young children for the same reason that the chemist who is to work in a sugar refinery should study chemical elements in simple compounds. The elements of any science should be studied in their simplest forms.

In the second place, the teacher should understand the instrumentalities by which he can affect the stuff with which he works. He should know the tools of his trade—mathematics, languages, and the other subjects of study, school buildings, and all the material setting of educational activity, systems of school organization, schemes of school economy, devices and tricks of method,—in a word, the tools and technique of the business. No teacher should be expected to know all of this field. The subjects of study and general technique of the primary school are quite different from those of the university, but the teacher should be thoroughly acquainted with the part of this field in which he is going to work, and with its general relations to the whole.

But grant that the teacher knows as much concerning the natural history of human beings as is known to-day; grant that he can stand in the presence of a child and understand him physically,

mentally, morally, æsthetically, and spiritually; and grant further, that he is thoroughly acquainted with the technique of his craft; he is still powerless to move in any direction; he does not know what he wants to make. He has no ideal, no aim, no end in view. He is like a sculptor standing before a block of marble, with his tools in his hands. He may be perfectly acquainted with the substance before him, and perfectly acquainted with the technique of his art; but until he knows what he wants to make, he cannot put mallet to chisel. If he attempts to do so, he is as liable to spoil the block of marble as to develop a beautiful statue.

So, in the third place, the teacher must have a philosophy of life, a theory of education, an ideal of human development. In the past, this final ideal, this end of man, has been found in inspired statements. One school has maintained that God has written down the whole law of man's development in inspired words, and that the teacher who knew his children and his tools had only to work to the line laid down in the Bible,—that is to say, to the interpretation of the Bible accepted by his particular creed. This was the view held in large part from the third to the sixteenth century, and it is still widely operative. Another school looks for its aim to some metaphysical system, and finds the line to which it must work in the words of a Locke or a Herbart. This solution has been widely accepted since the sixteenth century, and is followed by the majority of pedagogues to-day.

Just now we have a new school filled with the spirit of our modern science, which is fixing its attention so intently upon the nature of the child, that it is forgetting the necessity of having some aim, some ideal, toward which it can work. When reproached with this shortsightedness, it says: Follow the interest of the child; this is a sane universe, and you can safely follow the leadings of nature. It forgets that there are decaying as well as advancing civilizations, that there are retrograding as well as advancing organisms.

The history of education here comes to our aid. It is only by looking into the past that we can catch glimpses into the future. The man who has carefully studied the development of the religious instinct from its first appearance among primitive men can make an estimate as to the next step in advance that probably lies before the child whom he is trying to form. So it is in politics, industry,

family relations, or any of the other vital activities that are to make up the future life of the child. If any glimpse of final and ultimate aims is to be attained, it must be reached in this way. Such study will not discard the inspired wisdom embodied in theologies and philosophies, but it will bring them into relation with literatures, languages, works of art, and everything on which man has left the impress of his thought, his feeling, or his purpose.

For this purpose, it is apparent that the history which deals only with names and dates and dynasties is of little use. It is a spiritual understanding of trends and tendencies in human affairs that we need, and this can come only through the study of what the Germans call *Culturgeschichte*, which is a combination of our older history with anthropology and sociology, and with something more.

Nor is the study of the educational theories that gather around the names of reformers, and which usually passes for the history of education, sufficient. The biography of Comenius, and his ideas and theories, are of value in the general history of the time in which he lived; taken out of their setting and taught in connection with the ideas of Pestalozzi and Rousseau, they serve simply as nuclei around which can gather pedagogical discussions and feelings.

Further, this history must be studied directly from the original sources. The prospective teacher wants to know, not what Gibbon thought about the early Christians, but how an early Christian actually thought and felt. There is only one way in which he can learn this, and that is by bringing his spirit into immediate personal contact with the spirit of the early Christian as embodied in his letters, his art, and his works. In time we shall have sifted collections of the world's records brought together, so selected and arranged that the student of pedagogy can see in them what ideals of life have been held in the past, how men have gone to work to realize these ideals in the on-coming generations, and with what results. He can see successive ideals that have followed each other, and so he can come to feel the upward trends and movements in advancing civilization, until in time he learns to prophesy, and then he has an ideal toward which he can work.

Another very great value in such a study of the history of education lies in its liberalizing effect upon us. No other body of people has greater need of liberality in thought than we who are

teachers, and no other class of educated people is so dogmatic as we are, if we except certain classes of the priesthood. This, I suppose, is due to the fact that we are descended from a dependent church-class, that we live and work with inferior minds that do not react against us so as to keep us fair-minded, and that we are considered by society as the conservers of forms and traditions. The most liberalizing thing that can come into the life of a dogmatic teacher is, doubtless, travel and association with men of affairs. Next to this comes such history study as I have been describing. Delsartians introduce their gymnastics by disintegrating exercises, to break up old physical tensions. The study of the history of civilization is such a disintegrating exercise for the soul of man, and I would prescribe it to teachers as a corrective for those natural tendencies to dogmatism that inhere in our calling.

It is possible to carry on such historical study as is here indicated by any one of several methods, and the papers printed in these *Studies* illustrate some of these different lines of work.

In the first place, preliminary to our study of method, we examined the historical sense itself, as it develops among early peoples. In this examination, Mrs. Barnes finds (p. 29), that among early peoples, history rests upon the sense of cause and effect, the sense of the social unit, the sense of time, and the sense of the value of a true record. She finds these existing together, sometimes one leading, sometimes another. She finds the material to be intensely personal, existing as myths, as chronologic lists, or æsthetic or didactic narrative. In a further examination of the historic sense among children, we find (pp. 43 and 83) essentially the same interests, conditions, and tendencies as among early peoples.

In the next papers we begin the illustration of method by taking up special peoples, the Aztecs (p. 73) and the Chinese (p. 112), and asking: What ideals of manhood, womanhood, and childhood existed, and what relation was there between these ideals and the place, method, material, and *personnel* of the instruction?

In the next papers (pp. 156 and 194), Miss Holbrook takes up two periods in our own history, and largely through an examination of the text-books of the time, tries to answer this same question of ideals and instrumentalities. In Mr. Krüsi's translation of his father's autobiography, we have tried to show the value and bearing of a personal record in answering this same question, and in

Mrs. Barnes' article in this number, we have tried to show the value of a statistical method.

There are several other lines of work that might have been illustrated in this series. We might have had a study based on pictures of buildings, statuary, and other material products of a period; we might also have had a study on the development of some particular scientific, or theological, or philosophical dogma, showing its successive stages and the struggles for and against it. It is a pity, too, that we could not illustrate more perfectly the bearing of anthropology and sociology upon all of this work. But these are subjects only just now coming to the front and demanding recognition. Possibly, the purely historical aspects are enough for us to attack at present. If I am not a very bad prophet, this history of civilization, this genetic study of the developing soul in all its possibilities, is to be a foundation study in our new professional normal schools and in the departments of pedagogy now forming in all of our colleges and universities.

THE PROGRESS OF THE GODS.

EDWARD HOWARD GRIGGS.

The Egyptian chiseled out dumb granite Gods,
Vague monsters, brute and human, whose vast size
O'er-powered their maker, man, and cast him down
In abject terror at their moveless feet.

The Greek, with free and cheerful hymn of praise,
Carved human Gods, wise, sweet and beautiful,
The breathing images of earthly thought
Made with the calm restraint of perfect art,
Which knows that greatness never is in size,
But in the true and clear embodiment
Of dreams that touch man's heart with heavenly fire.

Man carves no longer Gods of speechless stone,
The lesson of the ages has been learned.
Veiled Isis, mighty Memnon, Horus, and
Those fair Greek Gods eternal in their youth,—
Great Zeus, wise virgin Pallas, Aphrodite,
Apollo golden-haired,—these dwell unseen
Within the temple of the human heart,
The temple of the ages, vast, mysterious,
The shrine of all the Gods to whom the prayers
Of men in epochs numberless have risen.

Man stands to-day serene and fearless, free,
No longer dominated by the forms
Which body forth his own imaginings,
Knowing the meaning and the destiny
Of all the ages lies within his soul.

NOTES.

Notes on Children's Drawings. Professor Elmer E. Brown has just published *Notes on Children's Drawings* as No. 1 of Volume II of the *University of California Studies*. It is a quarto monograph of seventy-five pages, and can be had from the University of California, Berkeley, for fifty cents. The *Notes* are made up of reports on the drawings of particular children by four observers, the most extended of these reports being made by Miss Milicent Shinn. A valuable summary by Professor Brown closes the monograph. It is handsomely illustrated.

Periodicals by Children. Children love to imitate the activities about them. In a university settlement the possibilities in this line are somewhat restricted, but in our community we have two periodicals born out of this imitative tendency, and they are both of them valuable for students of the phenomena connected with developing human beings. *Little Nonsense: Published now and then by Elsie, John, and George Branner, Editors and Proprietors*, is now in its sixth number. *The Shooting Star: Published monthly by Alice, Hubert, and Olaf Jenkins*, is now in its fourteenth number, though the first twelve appeared only in manuscript. Back numbers are now exhausted, but current numbers can be obtained by addressing the editors as above at Stanford University, California, enclosing six cents in postage stamps.

Observation School Monographs. *Tompkins School Monographs*, No. 1, *The School*, by Elmer E. Brown, and No. 2 of *Child-Study in the Tompkins School*, by Thomas P. Bailey, Jr., will be read with interest by all who are connected with the training of teachers. The Tompkins School is the experimental and observation school of the Department of Pedagogy of the University of California, and these pamphlets are reprinted from the Public School Report of Oakland, California, 1895-96.

Local History by Children. A child who has written up the history of a local building, institution, or man, under the guidance of an intelligent teacher, even though it be done in the most childish way, has gained a knowledge of the realities of history and a sense of the discounts that must be applied to all historical narrative, which nothing else can give. Teachers interested in this work should see *Sketches of Leading Places of Interest in Monterey: Written by Pupils of Monterey Public School*. For copies, send fifteen cents to Frances B. Orton, Monterey, California.

Child-Study Syllabus. In connection with a Saturday Teachers' Class, Will S. Monroe, of the State Normal School, Westfield, Mass., is issuing a syllabus of work on child-study that will be found of value to students in this field. His bibliographies are especially helpful.

INDEX TO STUDIES IN EDUCATION

1896-97.

- Alcott, Louise, 94.
 Ambitions, 243.
 Artistic Interpretations of Childhood, 10.
 Australian Tribes, 30.
 Autobiographies, 9.
 Aztecs, 73, 117, 358.
 Bad Girl's Story (A), 107.
 Barbara, 65, 341.
 Barnes, Earl—Introduction, 3; Methods of Studying Children, 5; Commentaries on Pictures, 23, 63, 105, 155, 180, 227, 265, 341, 367; Comments, Suggestions, and Questions on Stories, 25, 66, 108, 148, 183, 227, 298, 341, 367; Discipline at Home and in the School—The Problem, 27; What to Read, 71; How to Study the Subject, 110; Examination of the Evidence, 149; How to Work up the Evidence, 190; The Reducing of Data to Numerical Tables, 228; Tabulated Results, 270; Generalizations, 299; Conclusions, 365; Bibliographies of Child-Study, 68; Children's Collections, 144; Intellectual Habits of Cornell Students, 163; A Study on Children's Interests, 203; Agnes Sinclair Holbrook, 240; Books and Pamphlets Intended to Give Sex-Information, 301; The Child as a Social Factor, 355; Child-Study: General Conclusions, 363; Bibliography of the Published Work of G. Stanley Hall, 371; The History of Education: Conclusions, 371.
 Barnes, Earl and Mary S.—Education among the Aztecs, 73; Historical Ideals and Methods of Chinese Education, 112.
 Barnes, Mary Sheldon — Historic Sense among Primitive Peoples, 29; The Historic Sense among Children, 43, 83; Commentary on *My Educational Recollections*, 280; The Intellectual Leadership of Germany in the Nineteenth Century, 380.
 Basel, 39.
 Bashkirtseff, Marie, 9.
 Bennett, C. J. C.—Bibliographies of Child-Study, 68.
 Biblical Stories, 182.
 Bibliography—for Historic Sense, 38; Children's Drawings, 64; of Child-Study, 68; of Children's Plays, 184; Books and Pamphlets Intended to Give Sex-Information, 301; Published Work of G. Stanley Hall, 371.
 Binet, Alfred, 203.
 Biographies, 10, 11.
 Bluebeard, 62.
 Book of Rites, 112.
 Brown, Elmer E., 397.
 Burke, Frederic L., 367, 371.
 Bushmen, 30.
 Chandler, Katherine A.—Children's Interest in Plants, 217.
 Child as a Social Factor, 355.
 Child's Attitude toward Perspective Problems, 283.
 Childhood of Moses, 182.
 Children and Ghosts, 53.
 Children's Attitude toward Ghosts, 175.
 Children's Attitude toward Law, 213, 254.
 Children's Interest in Plants, 217.
 Children's Sense of Money, 323.
 Children's Attitude toward Punishment for Weak Time Sense, 344.
 Children's Collections, 144.
 Children's Plays, 171.
 Children's Motives, 352.
 Children's Ambitions, 243.
 Chinese Education, 112, 358.
 Clark, Arthur B.—The Child's Attitude toward Perspective Problems, 283.
 Clavigero, 32, 73, 74.
 Cohn, Hermann, 302.
 Collections, 144.
 Color Sense, 11.
 Compayré, 73.
 Confucius, 112.
 Cushman, Florence, 380.
 Dakotas, 31, 33.
 Darrah, Estella M.—Children's Attitude toward Law, 213, 254, 366.
 Da Vinci, 20.
 Dead Baby (The), 369.
 Development of Personality in Children, 309.
 Direct Studies on Children, 11.

INDEX — *Continued.*

- Discipline at Home and in the School, 26, 71, 110, 149, 190, 213, 228, 270, 299, 332, 344, 365.
- Drawing—See pictures.
- Earthquake (The), 148.
- Episodes of Three Lives, 266.
- Esquilmaux, 31.
- Evidence (Sense of), 83.
- Fear in Childhood, 18.
- Fielder, Belle, 380.
- Florence, 369.
- Fragmentary Thinking, 264, 367.
- Frear, Caroline—Class Punishment, 332, 366.
- George, 148.
- George Junior Republic, 258.
- George Washington and the Cherry Tree, 178.
- Ghosts, 19, 52, 123, 175.
- Gill, 34, 36.
- Griggs, Edward Howard — The Development of Personality in Children, 309; The Progress of the Gods, 369.
- Hall, G. Stanley, 12, 371.
- Hanns Guck-in-die-Luft, 102, 154, 265.
- Hawley, Harriet, 342.
- Helen: The Life-History of Certain Imaginary Companions, 98.
- Historical Ideals and Methods of Chinese Education, 112.
- Historic Sense among Primitive Peoples, 29.
- Historic Sense among Children, 43, 83.
- Holbrook, Agnes Sinclair — Fear in Childhood, 18, 47; Memories of Things Read, 58; The New England Primer, 156; The Study of English in America after the Revolution, 194, 240.
- Hood, Margaret Graham — Two Children's Stories, 367, 369.
- How Children Judge Character, 94.
- Huc, 115.
- Illinois Society for Child-Study, 119.
- Imaginary Companions, 98, 101.
- Inductive Study, 39.
- Inference, 32, 90.
- Intellectual Habits of Cornell Students, 163.
- Intellectual Leadership of Germany in the Nineteenth Century, 380.
- Interests (Children's), 17, 47, 203, 227, 392.
- Introduction, 3.
- Jack the Giant-Killer, 10.
- Jenkins, Oliver P., 209.
- Johnny Look-in-the-Air, 102, 105, 154, 265.
- Jordan, David Starr—Perseus and Medusa, 339.
- Knight, 147, 341.
- Köhler, Anna, 47; How Children Judge Character, 94; Children's Sense of Money, 323.
- Krüsi, Hermann—My Educational Recollections, 230, 273.
- Lecky, 39.
- Letters by Children, 8.
- Li-Ki, 112.
- Little Girl's Letter, 297.
- Little Men, 94.
- Little Nonsense, 119.
- Local History, 397.
- Loti, Pierre, 9, 144, 219.
- Luckey, G. W. A., 11, 119.
- Maitland, Louise—Children and Ghosts, 53; Children's Attitude toward Ghosts, 175, 342.
- Memories of Things Read, 47, 58.
- Methods of Studying Children, 5, 348.
- Mexicans, 31, 32, 74.
- Mills, John Stuart, 9.
- Minna, 65.
- Money, 323.
- Monroe, Will S., 249, 397.
- Monterey County, 204.
- Moral Ideas, 352.
- Motives, 352.
- Müller, Max, 112.
- Murray, Lindley, 195.
- My Life, 107.
- My Educational Recollections, 230, 273.
- Myths, 31.
- Napa, 43, 63, 213, 246, 344.
- Names (Interest in), 60.
- New England Primer, 156, 195, 196.
- Northwestern Journal of Education, 119.
- Notes, 39, 119, 397.
- Oakland, 43.
- Official Child-Study, 119.
- Orton, Frances B., 397.
- Oswego Normal and Training School, 230.
- Parable of the Laborers in the Vineyard, 183.
- Pater, 10.
- Patterson, Alma—Children's Motives, 352.
- Periodicals by Children, 397.
- Perseus and Medusa, 338.
- Personal Journals, 8.
- Pestalozzi, 230, 235, 273, 331.
- Pictorial Evolution of a Man, 22.
- Pictures (Children's), 22, 62, 102, 154, 178, 179, 223, 264, 283, 367.
- Plays, 171, 184, 295.
- Polliwogs and Frogs, 223.
- Polynesians, 34, 36.
- Preyer, William, 11.
- Reading for Children, 119.
- Reminiscences, 8, 18, 58, 98, 144, 175, 217, 295, 364.
- Reynolds, John P., 303.
- Rhythm, 66.
- Ricci, Corrado, 23.
- Riverside, 344.
- Russell, E. H., 7.
- Sahagun, 73.

INDEX—Continued.

- San Diego, 246.
 San José, 243.
 San Mateo, 344.
 Sandwich Islanders, 30.
 Santa Cruz, 171, 246.
 Santa Paula, 43.
 Santa Rosa, 243.
 Schallenberger, Margaret, 72, 214.
 Schurman, J. G., 164.
 Seminary Method, 380.
 Sense of Truth, 33.
 Shaw, Edward R., 212.
 Shooting Star, 397.
 Sisson, Geneva—Children's Plays, 171; Bibliography of Children's Plays, 184; Who Has the Best Right? 259.
 Smythe, Louise, 119.
 Snedden, David S.—Children's Attitude toward Punishment for Weak Time Sense, 344, 366.
 Social Sense, 90.
 Spencer, Herbert, 71.
 Stanford Experimental School, 23, 47, 51, 66, 259.
 Statistical Studies, 12.
 Stevenson, Robert Louis, 10, 343.
 Stories by Children, 24, 47, 61, 65, 107, 147, 182, 223, 266, 367.
 Story of Bluebeard, 62.
 Struwwelpeter, 10, 105.
 Studies in Historical Method, 29, 43, 83, 380.
 Study of Children's Own Stories, 15.
 Study of Children's Superstitions, 123.
 Study on Children's Interests, 203.
 Study of English in America after the Revolution, 194.
 Superstitions, 123.
 Talking Hat (The), 369.
 Taylor, J. P., 119, 191, 244.
 Thurber, Charles H., 119.
 Time Sense, 32, 89, 344.
 Tolstol, 9.
 Troy, 47.
 Tucker, M. A., 51.
 Two Love Stories Written by Children, 24.
 Two Little Boys' Stories, 147.
 Two Little Girls' Stories, 65.
 Veddaha, 30.
 Vertical Writing, 39.
 Vostrovsky, Clara—A Study of Children's Own Stories, 15, 26, 47, 61; Helen: The Life-History of Certain Imaginary Companions, 98, 120; A Study of Children's Superstitions, 123; What Determines Leadership in Children's Plays, 295, 368.
 Wardall, Ralph, 380.
 Webster, Noah, 197.
 What Determines Leadership in Children's Plays, 295.
 Who Has the Best Right? 259.
 Willard, Hattie Mason—Children's Ambitions, 243.
 Wilson, Louis N., 371.
 Winslow, Anna Green, 9, 159.
 Wolfe, H. K., 119.
 Wood, Job, 204.
 Woodward, N. M., 39.
 Worcester Normal School, 7.
 Wreck (The), 147.
 Zschokke, Mrs. A. P., 380.

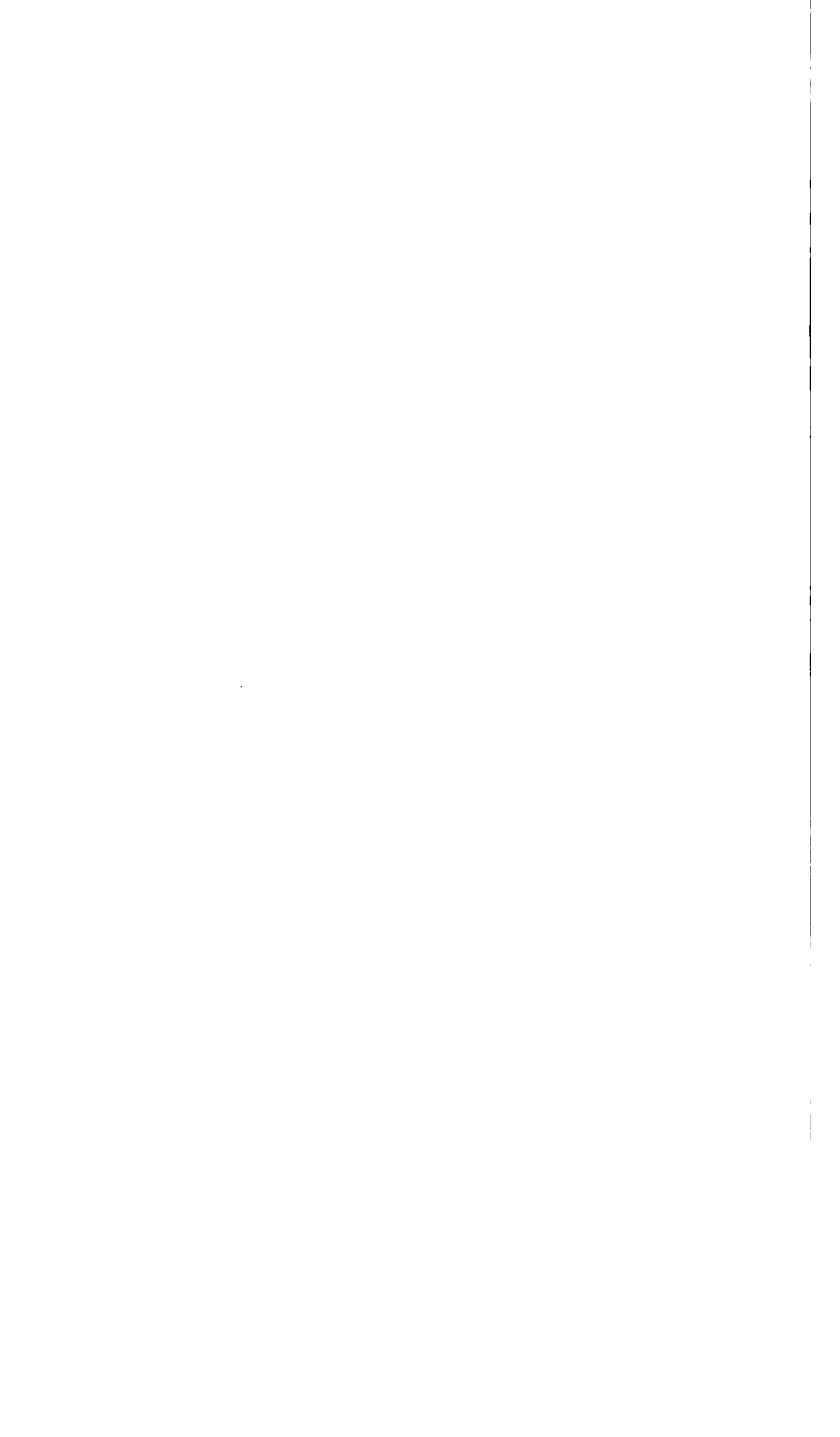
CONCLUSION.

This issue completes *Studies in Education*, as projected a year ago. No further numbers will be issued before 1899, and possibly not then.

Sets of the ten numbers in this series can be obtained for one dollar and fifty cents; bound in cloth, two dollars; postage prepaid.

Address all orders to

EARL BARNES,
 Stanford University,
 California.



LB1106 .B3
Studies in education -- devoted
Gutman Library



3 2044 028 887

